Decision ________________

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Switching in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.	Application 01-02-024 (Filed February 21, 2001)
Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Loops in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.	Application 01-02-035 (Filed February 28, 2001)
Application of The Telephone Connection Local Services, LLC (U 5522 C) for the Commission to Reexamine the Recurring Costs and Prices of the DS-3 Entrance Facility Without Equipment in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.	Application 01-02-034 (Filed February 28, 2001)

INTERIM OPINION ESTABLISHING INTERIM RATES FOR PACIFIC BELL TELEPHONE COMPANY'S UNBUNDLED LOOP AND UNBUNDLED SWITCHING NETWORK ELEMENTS

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I. Summary

This proceeding, known as the "UNE Reexamination," was initiated following formal requests by carriers interconnected with Pacific Bell Telephone Company (Pacific) for the Commission to reexamine certain prices that Pacific Bell charges competitors who purchase "unbundled network elements" (UNEs). Through purchase of these UNEs, competitors are able to use portions of Pacific's network. By this decision, we grant in part a motion for interim relief filed by AT&T Communications of California, Inc. (AT&T) and WorldCom, Inc. (WorldCom) (hereinafter referred to as "Joint Applicants") and we set interim rates for two UNEs, namely unbundled loops and unbundled local and tandem switching. We find that interim rates are necessary due to delays in this proceeding caused by inadequacies in Pacific's cost study filing and the need to examine competing cost models.

For unbundled loops, we adopt an interim discount of 15.1% from Pacific's current loop price for the basic (2-wire) loop, which results in an interim loop rate of $9.93.[1] Joint Applicants had requested a 36% reduction, based on a trend analysis of 1994 and 2000 loop cost data using the HAI Model version 5.2a (HAI model or HAI). After considering comments on this approach, we have made adjustments to the HAI model. Specifically, we altered Joint Applicants' line counts to reflect physical facilities rather than "voice grade equivalents." Also, we removed the effects of the investment/expense factor approach from the HAI trend analysis by holding expenses per loop constant. The analysis leading to the discount noted above is contained in Appendix B.

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1 *See* Appendix A for a complete list of the adopted interim rates.

For unbundled switching, we adopt an interim discount of 35.8% for the port, 50.8% for usage rates, and 41.9% for tandem switching. Joint Applicants requested that we impose an interim rate based on a proposal by SBC-Ameritech for switching rates in Illinois. This request amounts to a 69% discount from current local switching rates and a 79% reduction from current tandem switching rates. We decline to adopt this approach, and instead adopt interim switching rates using the same trend analysis that we used to set an interim loop rate. The trend analysis is based on HAI model runs that were submitted with Joint Applicants' motion for interim relief. Appendix C contains the trend analysis that results in the discounts described above.

This proceeding will remain open to set final UNE rates for unbundled loops and unbundled switching. The interim rates adopted in this order are subject to adjustment, either up or down, from the effective date of this order until final rates are adopted.

Through this interim order, we also dismiss Application 01-02-034, filed by The Telephone Connection Local Services LLC, which requested review of Pacific's costs for the DS-3 entrance facility without equipment.

II. Background

A. Applications for Annual UNE Reexamination

In Decision (D.) 99-11-050, in the Commission's Rulemaking and Investigation to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks (Rulemaking (R.) 93-04-003/Investigation (I.) 93-04-002, hereinafter "OANAD proceeding"), the Commission set prices for UNEs offered by Pacific. In this 1999 order, the Commission recognized that the Total Element Long Run Incremental (TELRIC) costs adopted by the Commission in 1998 (D.98-02-106) and used to set prices in D.99-11-050 were "based largely on data that has not been updated since 1994," and "there is evidence that some of these costs may be changing rapidly."[2]

Accordingly, the Commission established a process in D.99-11-050 that invited carriers with interconnection agreements with Pacific to annually nominate up to two UNEs for consideration of their costs by the Commission. The decision required that a party nominating a UNE for review must include a summary of evidence demonstrating a cost change of at least 20% (up or down) from the costs approved in D.98-02-106 for the UNE to be eligible for nomination.

In February 2001,[3] the Commission received four separate requests to nominate UNEs for cost re-examination. The four requests and the UNEs for which cost review was initially sought were as follows:

- A.01-02-024, filed jointly by AT&T and WorldCom, requesting that the Commission re-examine the recurring costs and prices of unbundled local and tandem switching.
- A.01-02-034, filed by The Telephone Connection Local Services, LLC, (Telephone Connection) requesting that the Commission re-examine the recurring costs and prices of the DS-3 entrance facility without equipment.
- A.01-02-035, filed by Joint Applicants, requesting that the Commission re-examine the costs and prices of unbundled loops.
- A motion filed by Pacific in the above-captioned OANAD proceeding requesting that the Commission

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[2] D.99-11-050, *mimeo.*, p. 168.

[3] All dates are 2001 unless otherwise noted.

> defer any re-examination of the costs and prices of UNEs until the United States Supreme Court has completed its consideration of the challenge to the Eighth Circuit's order on the FCC's TELRIC cost standards.[4] In the alternative, Pacific recommends that if its motion to defer is denied, the Commission should re-examine the cost of the Expanded Interconnection Service Cross Connect (EISCC).

On March 28, the assigned Administrative Law Judge (ALJ) issued a ruling consolidating these applications with the OANAD proceeding for the limited purpose of taking comment on Pacific's motion to defer and on which, if any, UNEs should be re-examined pursuant to D.99-11-050.[5]

B. The Scoping Memo for the 2001 UNE Reexamination

On June 14, the Assigned Commissioner and ALJ issued a joint ruling (hereinafter, "Scoping Memo") denying Pacific's motion to defer the UNE Reexamination proceeding. The Scoping Memo agreed with the Joint Applicants and other parties that the Commission retained the independent state authority to review UNE costs and prices and disagreed with Pacific's assertion that, given the case pending at the Supreme Court, the Commission could no longer rely on TELRIC. Specifically, the Scoping Memo found that the stay of the Eighth Circuit's order had the effect of maintaining the status quo, which means that the FCC's TELRIC rules remain in effect. Further, the Scoping Memo stated

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[4] *Iowa Utilities Bd. v. F.C.C.,* 219 F.3d 744 (8th Cir. July 18, 2000), *cert. granted, AT&T Corp. v. Iowa Utilities Bd.,* 121 S.Ct. 878, 69 U.S.L.W. 3283 (U.S. Jan. 22, 2001) (No. 00-590).

[5] Comments were filed on April 20 by Joint Applicants, the California Association of Competitive Telecommunications Companies (CALTEL), Communications Workers of America District 9 (CWA), Office of Ratepayer Advocates (ORA), Pacific, The Utility Reform Network (TURN), Telephone Connection, and Z-Tel Communications, Inc. (Z-Tel).

that the Commission should move forward with its review of selected UNEs rather than await the outcome of federal litigation so that competitors would not have to pay prices for another year based on costs adopted in 1998.

The Scoping Memo stated that the summary of evidence presented by Joint Applicants led to a reasonable presumption that costs may have declined for unbundled switching and unbundled loops. Therefore, the Assigned Commissioner and ALJ found sufficient justification to accept the nominations of these two UNEs for review and initiate the UNE Reexamination proceeding.[6] The Scoping Memo set a schedule for Pacific to file switching and loop cost studies on August 15 and stated that, in the interests of moving quickly on the cost re-examination, competing cost models filed by other parties would not be allowed.

C. The Issue of Competing Models

At a prehearing conference (PHC) on July 9, Joint Applicants urged that the Commission allow them to file a competing cost model. In a July 11 ruling, the Assigned Commissioner and ALJ reiterated that it was appropriate to limit the scope of the proceeding to review of Pacific's model as long as it met three criteria. Specifically, the July 11 ruling required that Pacific's cost models and cost studies must allow parties to:

- Reasonably understand how costs are derived for unbundled loops and switching,
- Generally replicate Pacific's calculations; and

[6] The Scoping Memo went on to deny Telephone Connections' nomination of the DS-3 entrance facility without equipment and Pacific's nomination of the EISCC. These denials are affirmed by today's order.

- Propose changes in inputs and assumptions in order to modify the costs produced by these models.

The July 11 ruling discussed the importance of Pacific's model replicating prior OANAD results and left open the question of whether to allow the introduction of competing cost models if Pacific's filing failed to satisfy the criteria. In addition, the ruling required Pacific to provide Joint Applicants and any other requesting party with an advance electronic copy of the cost model or studies that Pacific would use as the starting point for its August 15th cost filing. Pacific provided this advance "starting point" to the parties on July 26.

The ALJ held a technical workshop on August 9 to have Pacific explain its "starting point" model and how it met the three criteria set forth in the July 11 ruling, and to allow staff and other parties to ask questions about the model. Following the workshop, comments were filed by Joint Applicants, TURN, and ORA and reply comments were filed by Pacific. In general, the comments criticized Pacific's "starting point" as not meeting the three criteria cost model because it was not an actual cost model, but merely a set of adjustments to the outputs of the models used to develops costs and prices in prior OANAD decisions.[7] Joint Applicants and other parties stated that several of the prior models are no longer available and it is not possible to re-run them with new inputs.

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[7] The prior OANAD decisions referred to are D.98-02-106 and D.99-11-050 in Rulemaking (R.) 93-04-003/Investigation (I.) 93-04-002.

In its reply, Pacific did not dispute that its filing involves adjustments to the outputs of the prior OANAD model and that it is not possible to provide the previously adopted model with new inputs. Nevertheless, Pacific defended its "starting point" and updated loop and switching cost studies filed August 15 as meeting the three criteria from the July 11 ruling. Pacific maintains that its starting point "maps back to the OANAD results" and that it provided source references that tie back to the data originally filed in OANAD. (Pacific's Workshop Comments, 8/23/01, p. 3.) Pacific contends that its filings allow parties to understand how costs in the update were derived from OANAD adopted outputs and to replicate Pacific's updated numbers. Pacific also maintains that parties can vary assumptions by "trac[ing] back through the OANAD data to reflect a change in cost." (*Id.*, p. 9.)[8]

D. Motion for Interim Relief

On August 20, Joint Applicants filed a Motion for Interim Relief, asking the Assigned Commissioner and ALJ to order Pacific to offer UNE prices for unbundled switching and unbundled loops at interim rates as set forth in the motion. Specifically, Joint Applicants propose an interim reduction of 36% in Pacific's UNE loop rates based, in part, on estimates of Pacific's forward-looking costs using the HAI model. For unbundled switching UNE rates, Joint Applicants proposed that Pacific set rates equivalent to either of two rate proposals made by Pacific's affiliate, SBC-Ameritech, in Illinois. If adopted, the Illinois switching rates would amount to essentially a 70% reduction from

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[8] On September 28, Pacific filed a revised "linked version" of its cost filing that links various cells on its spreadsheets so that changes in one cell's value are reflected in all linked cells.

current local switching rates. Joint Applicants again support this request using the HAI model as well as the FCC's Synthesis Model.

Joint Applicants justify the need for an immediate rate reduction by citing delays caused by alleged inadequacies in Pacific's starting point and August 15 cost filing and the need for the Commission to consider competing cost studies. Joint Applicants claim Pacific is charging inflated UNE prices that cause irreparable harm to competitive carriers. Finally, Joint Applicants ask that the interim rates be subject to "true-down"[9] as a sanction against Pacific for alleged misleading statements regarding its cost studies and delays in the proceeding.

Responses to the motion for interim relief were filed by Pacific, ORA, TURN, and Tri-M Communications (Tri-M). Pacific opposes the motion stating that 1) Joint Applicants have not justified the need for interim relief because they have not shown a need for emergency action by the Commission; 2) any grant of interim relief without a hearing or adequate opportunity to develop the required evidence would violate Pacific's due process rights; 3) the Commission cannot rely on the HAI Model for interim rates because it allegedly violates the Telecommunications Act requirement that UNE prices be based on cost; and 4) the proposal for a "true-down" violates state and federal law. The other parties all filed comments in support of the motion, and Joint Applicants filed a reply to Pacific Bell's response.

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[9] Essentially, a "true-down" means that if final rates are lower than interim rates, Pacific Bell should provide refunds to those who purchase unbundled loops or switching UNEs, but if rates are ultimately higher than any interim rate, buyers of these UNEs would not owe any additional payment.

On September 13, the ALJ held a prehearing conference regarding the motion for interim relief.

On September 28, the Assigned Commissioner and ALJ issued a joint ruling stating a desire to consider interim relief, but requiring additional filings from parties on the exact amount and the nature of the interim relief proposals. The September 28 ruling stated that interim relief appeared justified because Pacific's August 15 cost filing did not meet the three criteria established in the July 11 ruling.

III. Interim Rates are Warranted

This decision affirms the Assigned Commissioner's and ALJ's September 28 joint ruling regarding the need for interim relief. We affirm the ruling's conclusion that the Commission has the authority to set interim rates and has done so on numerous occasions. Despite Pacific's argument to the contrary, interim rates need not be premised on an "emergency" alone, but can be adopted for other reasons, including procedural delays. The California Supreme Court addressed precisely this issue in *TURN v. CPUC* (44 Cal. 3d 870, 878 (1988)). In the underlying decision, the Commission granted an interim rate increase while expressly declining to make any finding that the "the interim rate increase was required by a financial emergency, or that the reasonableness of the pertinent costs was undisputed." (*Id.* at 875.) The Commission's decision was upheld by the Supreme Court, which found that the overriding circumstance was the prospect of many months and years of hearings and deliberations before a final rate could be determined. (*Id.* at 879.)[10] The court affirmed that the Commission could set interim rates as long as the rate is subject to refund and sufficient justification for the interim relief has been presented. (*Id.* at 880.)[11]

Our action today to set an interim rate for the loop and switching UNEs is not precluded by D.99-11-050. In that 1999 order, we stated that the rates adopted therein would remain in effect until changed by an order in the annual UNE reexamination. The 1999 order does not limit our ability to consider and establish interim UNE rates in this UNE Reexamination proceeding.

Interim rates are necessary due to delays in this proceeding caused by the need to examine competing cost models. The Assigned Commissioner and ALJ initially limited the scope of this proceeding to an examination of Pacific's updated cost studies. Despite repeated requests from Joint Applicants to allow them to submit their own cost studies, the Assigned Commissioner and ALJ rejected the notion of competing cost studies unless Pacific's filing failed to meet three criteria. Following an August 9 workshop to understand Pacific's "starting point" for its upcoming cost filings, Joint Applicants and other parties alleged that Pacific was not actually filing updated versions of the earlier cost models.

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[10] See also *Re Southern California Edison Company* (28 CPUC 2d 203, 212 (1988) D.88-05-074), which held that "the existence of a financial emergency is no longer a standard which must be met in granting interim relief." The order also notes that full consideration of the issues in the case has delayed the case and is another factor in granting interim relief. (*Id.* at 212.)

[11] The adoption of interim rates is not limited to energy matters. (*See* 80 CPUC 462, 465 (1976) D.86352, wherein the Commission approved "interim provisional rates" at the request of Pacific for its "Dimension PBX" service as a result of delays in the proceeding to establish permanent prices for the service.)

These parties claimed that Pacific was merely filing adjustments to the outputs of the models used to set costs and prices in the prior OANAD proceeding. (*See* Joint Applicants Workshop Comments, 8/14/01; TURN Workshop Comments, 8/14/01.)

After review of these claims of insufficiencies in Pacific's filing, the ALJ and Assigned Commissioner determined that Pacific's filing did not meet the three criteria they had set forth. We agree that Pacific's "starting point" filed on July 26 and its updated cost studies filed on August 15 do not meet the criteria set forth in the July 11 ruling. Specifically, Pacific uses endpoints from OANAD and adjusts them rather than actually providing the former model with new inputs. Pacific's subsequent filing of a "linked version" does not correct this problem because it still does not provide the original model on which the calculations are based.

Pacific's filing fails the first and second criteria set forth in this proceeding because parties and staff cannot understand and replicate the calculations and the inputs of the prior OANAD models without the ability to run these models. Pacific itself is not replicating its prior OANAD models since it is not performing new runs of the SCIS model for switching investment, the Cost Proxy Model for loop investment, or other mainframe models used to calculate expenses and support investments. In other words, Pacific did not input changes to the prior OANAD model. Instead, as the Joint Applicants and other parties claimed, Pacific merely calculated the effect of estimated changes by adjusting the outputs of the prior OANAD model. While Pacific's "linked version" allows parties to trace through Pacific's calculations, it is not a model that constructs a forward-looking network. Finally, Pacific's filing fails the third criteria because parties cannot input their own numbers to Pacific's models and re-run them. Thus, it is impossible for parties to modify assumptions from the prior OANAD models.

Without the ability to modify assumptions and re-run the models, it is unclear how the evidence and assumptions that formed the basis for Joint Applicant's initial showing to open this proceeding can actually be tested, modified, and examined.

In their September 28 ruling, Commissioner Wood and ALJ Duda stated:

> We are concerned that if we were to proceed only with the filing presented by Pacific, any resulting UNE prices might not be cost-based as required by Section 252 of the Telecommunications Act of 1996. We will have less confidence in the results of our efforts without the ability to run an actual model and test inputs and assumptions. It is not clear if Pacific can amend its filing to overcome the problems identified. Because Pacific's filing does not currently meet our criteria, we are faced with the option of allowing Joint Applicants and other parties to file competing cost models.
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> …
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> Because of the substantial delay in the case that would be caused by either allowing Pacific to amend its filing or by considering competing filings, we are persuaded to grant some form of interim relief. (9/28 Ruling, p. 5.)

The September 28 ruling noted that Joint Applicants had provided an adequate initial showing in their initial April 20 filing in this case to support a reasonable presumption that costs for unbundled loops and unbundled switching had declined from previously adopted costs. Yet, Pacific's August 15 cost update filing does not allow the Commission staff, the Joint Applicants, or other parties to test this initial showing. For example, Joint Applicants provide

ARMIS[12] data indicating that Pacific's switch investments have declined 40% on a per minute of use basis from 1994 to 1999 due to increases in minutes of use and insignificant increases in switching investments. (Pitts Declaration for Joint Applicants, 2/21/01, para. 12.) Further, they provide data indicating that the price for adding "growth lines" has declined significantly since 1996. (*Id.*, para. 13.) Joint Applicants also indicate that based on service volume and cost data that Pacific reported to the FCC, Pacific's switching-related expenses and support investments have declined 23% (on an expense per line basis) and 32% (on an expense per minute basis) since 1994. (Murray Declaration for Joint Applicants, 2/20/01, para. 8-10.)

Regarding costs for unbundled loops, Joint Applicants assert lower capital costs due to Pacific's "Project Pronto," a large-scale upgrade of its fiber and digital loop carrier (DLC) facilities. (Murray/Donovan Declaration for Joint Applicants, 2/28/01, para. 24.) They also assert economies of density from a 48.5% increase in total access lines from 1994 to 1999. (*Id.*, para. 18.) Joint Applicants' figures for access line growth are based on ARMIS data that Pacific reports to the FCC. In addition, Joint Applicants claim that certain DLC equipment costs have dropped to as low as 25% of the initial price. (*Id.*, para. 30.) Pacific has not disputed a decline in DLC equipment costs,[13] and it does not dispute the ARMIS data cited by Joint Applicants on volume and line growth.

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[12] ARMIS (Automated Reporting Management Information System) is a data collection and information system maintained by the FCC. It contains data that incumbent local exchange carriers such as Pacific provide to the FCC pursuant to FCC reporting requirements.

[13] Regarding DLC equipment, "Pacific Bell does not dispute that DLC equipment prices have fallen in recent years." (Pacific Loop Comments, 10/19/01, p. 7.)

Furthermore, Pacific admits that it benefits from SBC-wide purchasing of switches and can obtain switches in California for a lower price than in Illinois.[14] Joint Applicants point out that SBC has proposed UNE rates for switching in Illinois that are drastically lower than the current switching rates in California.

Considering that many of Joint Applicants' assertions begin with Pacific's publicly reported data, it is reasonably plausible that at least some of these factors will lead to decreases in UNE rates for loops and switching. Nevertheless, Pacific's filings have left the Commission and parties without the ability to test or examine the effect of these documented and undisputed changes involving line growth, corporate mergers, switching investments and DLC technology. Pacific generally states that many of the cost declines shown in the public data from 1994 to 1999 were actually considered and included in the forward-looking models that developed the costs the Commission adopted in 1998. Unfortunately, the Commission has no way to verify this claim without the ability to replicate the costs adopted in 1998 using a model provided by Pacific.

Essentially, Pacific has presented us with a "black box" that does not allow us to test the summary of evidence that initially persuaded the Commission to open the case. The Commission must either trust Pacific's "black box" without further scrutiny, or delay the case while the Commission investigates other models or a revised model from Pacific. Neither of these options is acceptable.

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[14] Regarding switching costs, "Pacific Bell today still enjoys the benefits of volume purchases" under a "new SBC-wide agreement." (Kamstra Declaration for Pacific, 4/20/01, para. 6.) Pacific admits that it can obtain switches for use in California at prices equal to, or more favorable than, the prices at which it can buy switches for Illinois. (*See* Joint Applicants' Switching Reply Comments, 11/9/01, p. 8, citing a Pacific Bell discovery response.)

This case was initiated based on a summary of evidence of cost declines. Delays in this case could lead to prolonging current rates at non-cost-based levels. Under Section 252 of the Telecommunications Act of 1996, this Commission is required to set UNE rates based on cost. (47 U.S.C. § 252 (d)(1).) We cannot in good conscience succumb to the delays caused by the inadequacies of Pacific's filing in the face of this preliminary evidence that costs have declined.

Our decision to set interim rates is in part supported by a recent order of the D.C. Circuit *in Sprint Communications Company v. FCC*.[15] In the *Sprint* decision, the D.C. Circuit was asked to review the FCC's decision to grant in-region long distance authority to SBC for Kansas and Oklahoma. Appellants asked the D.C. Circuit to overturn the FCC's findings that UNE rates for Kansas were cost-based, claiming that the FCC could not properly find the rates in these states TELRIC compliant because "they are the product of a crude 'settlement' method, trimmed by an arbitrary 25% 'haircut.' " (*Id.*, at *22.) In its decision on the appeal, the court declined to overturn the FCC's finding that Kansas UNE rates were cost-based and specifically noted that it could not find fault with the FCC "for approving the Kansas Commission's compromise resolution of an issue that the parties' behavior had left a muddle." (*Id.*, at *25.) The court also discusses the difficulty in pinpointing TELRIC rates with exactitude and cites to a prior case where it stated:

> This argument, however, assumes that ratemaking is an exact science and that there is only one level at which a

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[15] *Sprint Communications Company v. F.C.C.*, 2001 U.S. App. LEXIS 27292, (D.C. Circ. December 28, 2001) (No. 01-1076). On January 7, 2002, Joint Applicants and Pacific jointly requested the Commission take notice of this D.C. Circuit decision. We herein grant that request.

> wholesale rate can be said to be just and reasonable…. However, there is no single cost-recovery rate, but a [wide] zone of reasonableness…. (*Id.*, at *12-13, citing *Conway*, 426 U.S. at 278.)

The reasoning of the D.C. Circuit case supports our interim resolution of this proceeding which the deficient cost filing of Pacific has, in some ways, "left a muddle" for the Commission to unravel. Furthermore, given the acknowledgement by the D.C. Circuit's order that TELRIC ratemaking is not an exact science and involves a "zone of reasonableness," we find support in the order for this Commission's discretion to adopt interim UNE rates.

By setting interim UNE rates for unbundled loops and switching, the Commission is not violating Pacific's due process rights. Pacific was given ample opportunity to comment on the proposed interim rates through an additional round of comments that were solicited by the Assigned Commissioner and ALJ. The rates will be subject to adjustment once final rates are determined, either up for down. Thus, Pacific is not harmed by the interim rate levels.

In summary, we find that that interim relief is warranted based on the substantial delays looming in this case caused by the inadequacies of Pacific's cost filing. Interim relief is also warranted based on the summary of evidence initially provided by Joint Applicants indicating a reasonable presumption of cost declines for unbundled loops and unbundled switching.[16]

Before we turn to the substance of the relief requested, we must address Pacific's criticisms of the HAI model that underlies the interim relief request. Joint Applicants' proposed interim relief is primarily based on analysis and documentation involving the HAI model and the FCC's Synthesis model. We recognize that the FCC and other states have criticized aspects of prior versions of the HAI model, particularly HAI's assumption of uniform customer dispersion. (Tardiff Declaration for Pacific, 9/4/01, p. 3.) Pacific also criticizes the total investment and expense levels produced by HAI as too low when compared with actual figures. (*Id.*, p. 2.) In addition, Pacific claims that HAI does not meet the three criteria for cost models and studies set forth in this proceeding.

Joint Applicants defend HAI, stating that the current version 5.2a is improved over all earlier ones. For example, Joint Applicants maintain that HAI's use of geocoded customer location data addresses the customer dispersion problem and is mirrored by other models currently in use, including the FCC's

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[16] On October 9, Pacific filed an Appeal to the Full Commission of the September 28 ruling. We decline to entertain this interlocutory appeal and it is herein denied. On October 19, Pacific filed a motion to vacate the September 28 ruling on the grounds that a pending motion in R.93-04-003/I.93-04-002/R.95-04-043/I.95-04-044 ("Section 271 Proceeding") involving a proposed discount to unbundled switching prices moots the need for interim relief. The motion in the Section 271 proceeding proposes an approximately 40-44% discount to UNE switching rates, depending on usage assumptions, on the condition that the Commission approves Pacific's Section 271 application. We will deny Pacific's motion to vacate the September 28 ruling because we are not persuaded to amend the schedule of the UNE Reexamination based on a conditional proposal that is currently pending in another docket.

Synthesis Model. (Klick Testimony for Joint Applicants, 8/20/01, p. 21.) Joint Applicants also contend that they are not basing the requested interim relief on the absolute output of HAI, but on a trend analysis of its outputs from 1994 to 2000. Joint Applicants reason that any systematic bias in HAI's calculation of the absolute level of investments and expenses does not impact the discounts determined through the trend analysis. (Bryant Declaration for Joint Applicants, 9/7/01, p. 2.)

We agree with Joint Applicants that because HAI is used for a trend analysis in loop and switching costs over the 1994 to 2000 time period, any criticism of its actual outputs are of lesser significance. While it is true that this Commission and the FCC have rejected prior versions of HAI, and the HAI model has its recognized shortcomings, it is the only actual "model" that has been filed thus far in the record of this proceeding to update UNE prices for loops and switching. We disagree with Pacific's claims that HAI does not meet the criteria for cost models and studies. HAI meets two of our three criteria because we have been able to understand how HAI derived its results for unbundled loops and switching and we have changed numerous model inputs and assumptions to produce our own results. While HAI does not exactly replicate the costs adopted in prior OANAD decisions, we find this is not necessary for purposes of a trend analysis because we are not using the absolute outputs of HAI to set rates. In addition, HAI does allow staff to replicate Joint Applicant's model runs.

Therefore, we will use the trend analysis based on the HAI model to set interim prices, even if the model has elements that we disagree with, rather than relying on Pacific's cost filing, because we cannot adequately test and model all inputs with Pacific's filing. In other words, we will base the interim relief on the analysis presented using the HAI Model, but this does not prejudge the methodology or cost model we will use to set UNE rates in a later phase of this proceeding. We are not endorsing use of the HAI or the Synthesis models to set final updated UNE rates for unbundled loops or unbundled switching.

IV. Pacific Should be Sanctioned for Failure to Comply with the ALJ's Discovery Rulings

During the course of this proceeding, Joint Applicants submitted a data request to Pacific requesting models, spreadsheets and other documentation supporting various UNE costs that were either proposed to or adopted by regulators in Illinois and Michigan for SBC-affiliated companies, namely SBC-Ameritech. On August 13, the assigned ALJ and the Law and Motion ALJ conducted a hearing to consider these requests and overruled Pacific's objections to production of this material on the grounds that the material was relevant to the proceeding. Pacific moved for reconsideration of this ruling, based on the claim that out-of-state cost data is not relevant to the issues in this proceeding. On October 3, the assigned ALJ denied this motion on the grounds that the material was relevant because it involved information and cost methodologies currently advocated in other states by Pacific's parent, SBC, and because Pacific has admitted it purchases major network components through SBC from common vendors and under SBC-wide purchasing arrangements.[17]

On October 12, Pacific filed an interlocutory appeal requesting that the Commission overturn the earlier ALJs' ruling and stay the ruling pending decision on the appeal. In its appeal, Pacific argues that the requested material

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[17] *See* Declaration of Mark Kamstra for Pacific, 4/20/01, para. 6, filed as an attachment to "Response of Pacific to ALJ's Ruling Consolidating Dockets for Limited Purpose and Setting Comment Schedule, and Response to Joint Applicants' Emergency Motion."

does not belong to Pacific, was developed by Ameritech prior to Ameritech's merger with SBC, and is held by SBC-Ameritech. Essentially, Pacific asserts it does not have "control" over these SBC-Ameritech documents and thus does not have to produce them. Pacific does not appeal the relevancy of this material. Pacific did not produce any of the requested documents that it was ordered to produce pursuant to the August 13 and October 3 ALJ rulings and there has been no stay of the earlier ruling ordering Pacific to produce the documents.[18]

On February 21, 2002, the Assigned Commissioner issued a ruling imposing sanctions on Pacific for failure to comply with the ALJs' earlier discovery rulings. Specifically, the Assigned Commissioner ruled that the SBC-Ameritech cost information that Pacific refused to produce would be deemed to support the adoption of interim rates for unbundled loops and unbundled switching that are lower than current rates. The Assigned Commissioner also ordered Pacific to produce the disputed material within 10 days from the date of the ruling, or risk further sanctions, including monetary penalties, in subsequent orders in this proceeding.[19]

By this order, we affirm both the ALJ rulings requiring Pacific to produce out-of-state cost information and the Assigned Commissioner's ruling imposing an issue sanction against Pacific for its noncompliance with the ALJ rulings. As

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[18] In addition, on October 31 Pacific filed a "Motion for Official Notice of a Public Utility Commission of Texas Order," stating that a recent Texas order supports its appeal on this discovery matter. Joint Applicants filed a response in opposition to the motion. On November 20, Pacific filed a motion to strike the response of Joint Applicants to the October 31 motion. Both motions are denied herein as moot because the Commission declines to hear Pacific's interlocutory discovery appeal.

[19] On March 4, 2002, Pacific produced the material in question in compliance with the Assigned Commissioner's Ruling imposing sanctions.

noted in the Assigned Commissioner's ruling, the Commission has the power to impose discovery sanctions where litigants violate discovery procedures and rulings of the presiding officer.[20]

With regard to Pacific's appeal of the ALJs' rulings, we note that the Commission generally looks with disfavor on interlocutory appeals of ALJ rulings. (45 CPUC 2d 630. *See* also *Pacific Enterprises*, 79 CPUC 2d 343, 421.) Under Commission Rule 65, the Commission may review evidentiary matters under two circumstances, either when considering the matter on its merits or when the presiding officer refers the matter to the Commission. In this case, the presiding officer did not refer the matter. Furthermore, we decline to entertain this interlocutory appeal and request for stay for the reasons stated below.

First, as we stated in *Pacific Enterprises*, the presiding officer must have the authority to rule on discovery motions and impose sanctions for discovery abuse. Without this authority, material evidence would remain undisclosed or unconscionable delay would occur as parties seek relief from the Commission.

Second, even if the Commission chose to entertain Pacific's interlocutory appeal and stay request, it would be denied. The Commission generally refers to California's Code of Civil Procedure (CCP) for guidance with regard to discovery procedures.[21] The CCP and the similarly worded Federal Rules of Civil Procedure require a party to produce documents within its "possession, custody,

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[20] *See* Assigned Commissioner's Ruling Imposing a Sanction Against Pacific for Failure to Comply with Discovery Rulings, 2/21/02, p. 8. *See* also *Pacific Enterprises*, 79 CPUC 2d 343, 421-422 (D.98-03-073), wherein the Commission affirmed the use of evidentiary sanctions against a utility for failure to produce documents.

[21] *See, e.g.*, P.U. Code Section 1794 (the Commission or any party may depose witnesses pursuant to the Code of Civil Procedure and compel the production of documents).

or control."[22] In his February 21, 2002 ruling, the Assigned Commissioner disagreed with Pacific's claim that it does not have custody or control over out-of-state cost information based on a review of the relationship between Pacific, SBC, and SBC-Ameritech. The Assigned Commissioner noted that federal courts have found a subsidiary can have control over its corporate parent's or a fellow subsidiary's documents.[23] Evidence the courts have considered to determine whether such control exists includes the degree of ownership and control the parent exercised over the subsidiary, whether the two entities operated as one, whether an agency relationship existed, and whether there was demonstrated access to documents in the ordinary course of business. Using this analysis, the Assigned Commissioner found that Pacific does have a close relationship with SBC-Ameritech, SBC has exercised control over Pacific, and there is demonstrated access to SBC and SBC-Ameritech documents in the ordinary course of business.[24]

In affirming the ruling of the Assigned Commissioner, we share his concern that Pacific appears to selectively exclude data from SBC-affiliated operations. As the Assigned Commissioner noted, Pacific has already produced documents developed outside of Pacific by other SBC-affiliated entities in the course of this case. Moreover, Pacific has waived any argument that it does not

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[22] C.C.P. section 2031 (a)(1); F.R.C.P. 34(a).

[23] Assigned Commissioner's Ruling, 2/21/02, p. 4-5.

[24] The Assigned Commissioner noted that Pacific's, SBC's, and SBC-Ameritech's operations are closely intertwined given that 1) SBC makes purchasing decisions for both Pacific and SBC-Ameritech, 2) Pacific uses SBC employees for testimony in this proceeding on costing, 3) Pacific has produced other material from SBC during the course of this proceeding, and 4) Pacific has used the same witness used by SBC-Ameritech in Illinois to support its testimony in California. (*Id.*, p. 5-6.)

have access to and/or control of documents of its affiliates and parent company by producing documents and witnesses of SBC and SBC-Ameritech in the course of this proceeding. We will not tolerate Pacific's blatant disregard for the rulings of the presiding officer. Pacific's non-compliance has deprived Joint Applicants of the benefit of reviewing material that was deemed relevant to the proceeding, and has prejudiced Joint Applicants in this proceeding by withholding evidence relevant to the issue of cost modeling and costs throughout the various states in which SBC operates. This material may have a bearing on costs in California. If we permitted Pacific's actions, this would set the dangerous precedent of allowing an entity to hide information from the Commission by developing and maintaining it at one of its sister companies or at its corporate headquarters. We agree wholeheartedly with the Assigned Commissioner that Pacific should not be able to pick and choose which information it will provide to the Commission. Therefore, we will not entertain Pacific's interlocutory appeal and we uphold the sanctions imposed on Pacific by the Assigned Commissioner for Pacific's non-compliance with prior rulings.

V. Interim Rates for Unbundled Loops

A. Joint Applicants Proposal

In their motion for interim relief, Joint Applicants request a statewide average loop rate of $7.51 for the basic (2-wire) loop.[25] This rate represents a 36% discount from the current statewide-average loop rate of $11.70.[26] In support of this request, Joint Applicants note a decline in forward-looking loop costs since 1994. Specifically, they cite reduced prices for DLC electronics that have dropped roughly 38% between 1994 and 2001. (Joint Applicants' Motion for Interim Relief, 8/20/01, p. 10.) They also report that Pacific's reported total of switched access lines grew from 15 million lines in 1994 to almost 19 million lines in 2000. (*Id.*)

Along with the motion, Joint Applicants provide testimony by witnesses Bryant, Mercer and Klick regarding estimates of Pacific's forward-looking costs for unbundled loops using the most recent versions of the HAI model and the FCC's Synthesis model. Dr. Bryant performed an analysis of the sensitivity of cost results calculated by the HAI model by changing two key input values, the cost of DLC equipment and demand levels. (Bryant Testimony, 8/20/01, p. 5-6.) According to his testimony, Bryant used the HAI model to simulate a 1994 view of forward-looking costs for California as constrained by the key input values that were adopted by the Commission in prior OANAD

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[25] This decision adopts an interim rate for the basic loop only, and does not set interim rates for any other loops, such as the 4-wire, DS-1 or DS-3.

[26] $11.70 is the statewide-average loop price that the Commission adopted in D.99-11-050 based on the costs adopted in D.98-02-106. The Commission recently adopted deaveraged loop rates in D.02-02-047; however, today's order does not address interim discounts to deaveraged loop rates because they were not proposed in Joint Applicants' motion for interim relief.

decisions. He then used this starting point to change DLC equipment and demand levels for 2000 and compared HAI's outputs for 1994 and 2000. Bryant states that the combined effect of these two input changes is a 36% decrease in average loop cost from 1994 to 2000. (*Id.*, p. 6.) Joint Applicants claim that the Synthesis Model confirms this loop cost analysis. Based on this percentage change in the model output after changing only two inputs, Joint Applicants request a 36% reduction from the UNE loop rates adopted in D.99-11-050.[27]

B. Response

On October 19, Pacific filed substantive comments in response to the proposed 36% loop rate reduction. Pacific maintains that the three cost drivers relied on by Joint Applicants -- line growth, DLC electronics costs, and expenses -- do not support a 36% reduction in current UNE loop prices. We will discuss Pacific's criticisms of Joint Applicant's proposal, and responses to Pacific's criticisms, by issue below.[28]

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[27] Joint Applicants contend that further circumstances most likely lead to an even lower rate, and therefore the 36% reduction that they request is likely conservative. Joint Applicants maintain that existing UNE loop costs are based on assumptions regarding "fill factors" and the amount of structure that is shared (*e.g.* poles, trenches) that the FCC has found to be inappropriate for a forward looking analysis. If fill factors and structure sharing assumptions were increased to levels that the FCC has found to be forward looking, Joint Applicants claim that the discount from current rates would be higher than the proposed 36%. (Joint Applicants' Loop Reply Comments, 10/30/01, p. 21.) "Fill Factor" is a manner of expressing the percentage of Pacific's loop plant capacity that is in use as opposed to spare capacity. If a network has 30% spare capacity, then the network's fill factor is 70%.

[28] Reply comments on interim loop prices were filed by ORA, TURN, Joint Applicants, Mpower Communications Corporation (Mpower). The comments of Mpower were subsequently stricken in a 12/6/01 ALJ ruling.

C. Discussion

1. Line Growth

Pacific states that Joint Applicants' line growth assumptions in the HAI model are flawed because they incorrectly treat special access facilities, particularly DS-1 and DS-3 lines, as ordinary copper loops. For example, Joint Applicants have attributed 24 lines to each DS-1 line and 672 lines to each DS-3 line because these lines carry 24 and 672 "voice grade equivalent" (VGE) channels. In contrast, Pacific notes that a DS-1 line consists of merely two copper loops, while a DS-3 line is provisioned over fiber so it does not involve any copper loops. According to Pacific, the net effect of Joint Applicants' use of VGEs is to overstate the number of loops in Pacific's network by about 10 million. Further, these inflated line assumptions produce illusory "scale economies," such as larger cable sizes and excess structure sharing, which understate Pacific's loop costs. (Pacific Loop Comments, 10/19/01, p. 4.)

Joint Applicants defend their modeling of line growth by claiming that the VGE method is well accepted and conservative. Joint Applicants cite examples of the FCC endorsing the use of line counts based on VGEs in its Synthesis Model, although they note that the FCC ultimately adopted a methodology that develops the network on a physical pair basis and divides the resulting total investment by the number of voice grade equivalents. (Klick Declaration, 10/30/01, p. 5.) Joint Applicants claim that using VGEs to model line growth is actually conservative because treating each channel on a DS-1 or DS-3 line as a copper line adds more cost per line than Pacific would actually incur to provision services using fiber. (Donovan Declaration, 10/30/01, p. 3.) They also note that Pacific has admitted significant volume growth for high capacity services provided over DS-1 and DS-3 facilities. Joint Applicants state that any analysis of line growth must be based on VGEs because DS-1 and DS-3 lines share outside plant structure with basic loop facilities. They allege that if DS-1 and DS-3 growth is not incorporated into the analysis, loop costs for basic unbundled loops will be overstated and this will shift shared costs to basic loops and force basic service to cross-subsidize business service.

In support of Joint Applicants' use of VGEs, ORA notes that Pacific itself measures wire-line growth in terms of VGEs. ORA maintains that line growth should be based on VGEs because it is not appropriate for the Commission to only consider the costs of copper loop plant when that plant is being replaced with less expensive and more cost effective fiber transport and distribution. (ORA Loop Comments, 10/30/01, p. 3.)

TURN contends that Pacific's analysis is contradicted by its own public data. The FCC's ARMIS database indicates that the total number of access lines in 2000 was 29.6 million. Further, TURN claims that all services that share facilities such as cables, conduit, trenches and remote terminal facilities should benefit from the economies of scale that have resulted from Pacific's substantial line growth. According to TURN, the net effect of Pacific's approach of excluding VGEs from any estimate of line growth is to "unreasonably shift costs away from the telecommunications lines utilized by large business customers and onto the loops utilized in the provision of residential and small business basic exchange services." (TURN Loop Comments, 10/30/01, p. 2.) In other words, if line growth is understated, this has the effect of causing higher per line costs for basic exchange loops.

For this interim rate setting exercise, we prefer to adopt a more conservative approach rather than a modeling technique that admittedly overstates the number of copper lines in Pacific's network. Although the FCC used VGEs for its Synthesis Model, parties admit that this model was not developed for UNE cost purposes but for universal service purposes. The goals of a model for UNE costing and universal service are quite different, and the FCC has suggested that state or company specific values should be used for UNE costing and pricing purposes.[29] As we develop interim estimates of costs for Pacific's loops, we are concerned that overstating the number of copper lines could create assumptions of scale economies in Pacific's network that are not realistic. Although we agree with TURN and ORA that we should not ignore the undisputed growth of special access services, we prefer to account for it on a physical pair basis at this interim phase. We will not adopt a modeling convention that assumes this growth is provisioned entirely over copper when it quite clearly is not. We are troubled by the notion that it is acceptable to overestimate the number of copper lines in the model simply because they are more expensive. Although Joint Applicants, TURN and ORA are concerned that residential users may cross-subsidize business customers, the VGE method would have the opposite effect of allocating the higher costs of a copper-based network to users of fiber-based special access services, potentially violating the TELRIC methodology. We want to avoid creating cross-subsidies in either direction and prefer to take a more careful look at this issue in the next phase of this proceeding.

Joint Applicants acknowledge that the FCC ultimately adopted a methodology that develops the network on a physical pair basis. We are

[29] *In the Matter of the Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Ninth Report & Order and Eighteenth Order on Reconsideration, released 11/2/99, para. 41 and footnote 125.

persuaded to adopt that approach for this interim exercise as well rather than inflating copper line counts to reflect special access lines using the VGE method. We will assign the cost of shared facilities such as conduit, poles, and trenches commensurate with a service's physical use of that facility. Therefore, we will alter the line counts in the HAI model to reflect physical facilities. In other words, we will account for DS-1 lines as two access lines since they are comprised of two pairs of copper, and we will account for DS-3 lines as one access line since they are provisioned over a single strand of fiber. This results in a line count of 16.3 million in 1994, growing to 20.0 million lines in 2000. When we insert these adjusted line counts into the HAI model and perform a comparison of 1994 and 2000 model runs, the net result is a decrease in the loop discount proposed by Joint Applicants from 36% to 25%, and an increase in the proposed interim loop rate from $7.51 to $8.73. (*See* Appendix B.)

In comments on the draft order, Joint Applicants claim that the draft decision's use of a physical line count methodology is flawed and produces illogical results. They claim that the physical line approach implies that DS-1 loops should be priced at twice the basic loop rate and that DS-3 loops should be priced at the same as the basic loop. They also claim that the methodology ignores the demands that DS-1 and DS-3 loops place on loop electronics. TURN and ORA echo these comments, while Pacific supports the draft decision on this issue as written.

The comments do not persuade us that the physical line count approach is flawed. This approach is used here solely for the purpose of allocating certain shared facility costs between basic loops and DS-1 and DS-3 facilities. We are not using this methodology to develop UNE costs for DS-1 and DS-3 loops so any extrapolation of the results for that purpose, as Joint Applicants, TURN and ORA suggest, is improper. We also have no record on the demands of DS-1 and DS-3 facilities on loop electronics on which to base any changes to the order.

2. Infill Growth vs. Plant Extension

Pacific claims that the Joint Applicants' line growth analysis is flawed because it assumes that 100% of growth in Pacific's network since 1994 has been "infill" growth, *i.e.*, growth in already developed areas. Pacific maintains that 70% of the growth in its network over the last several years has been growth to previously unserved areas, or "plant extension" growth, and only 30% has been infill. (Pacific Loop Comments, 10/19/01, p. 5-6.) Pacific alleges that the manner in which HAI models customer growth guarantees lower loop costs because it packs more lines and customer locations into hypothetical local distribution areas, or "clusters." (Tardiff Declaration, 10/19/01, p. 6-7.) Pacific asserts that in reality, plant extension growth tends to be more expensive because it involves the placement of new feeder and distribution facilities and longer cables. Accordingly, Pacific asserts that the costs of plant extension growth more than offset any potential per loop savings from infill growth.

Joint Applicants respond that Pacific's criticisms of the way HAI models growth are not consistent with accepted forward-looking costing principles. According to Joint Applicants, a cost model should not look at the cost of "infill" vs. "plant extension" growth because that approach only looks at the cost to augment existing plant to serve a new increment of demand since the prior OANAD costing exercise. Instead, a proper forward-looking methodology considers the cost to serve total demand in the most efficient manner possible, constrained only by Pacific's current wire center locations. Joint Applicants claim that HAI uses this latter approach and therefore, Pacific's criticisms are meaningless. (Joint Applicants' Loop Reply Comments, 10/30/01, p. 11-12; Murray Declaration, 10/30/01, p. 3-4.)

In addition, Joint Applicants defend the placement of customers under the HAI model by explaining that HAI uses precise geocoded customer location data to place approximately 65% of the customer base. For the approximately 35% of customer locations that are unknown, the model distributes customers uniformly along all roads within the census block. Joint Applicants maintain that this approach conservatively over-disperses customers and potentially increases loop costs by overestimating loop plant. (Joint Applicants' Loop Reply Comments, 10/30/01, p. 18-19; Mercer Declaration, 10/30/01, p. 7-8.) Joint Applicants directly dispute Pacific's assertions that 70% of growth involves costly plant extensions by citing statistics that suggest the majority of growth is infill instead.[30] Joint Applicants also contradict Pacific's assertions that loop costs have increased by providing ARMIS data showing decreases in total loop investment per line from 1994 to 2000. (Joint Applicants' Reply Comments, 10/30/01, p. 23.)

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[30] Joint Applicants cite statistics that California households and businesses have increased approximately 5% and 6.5% respectively over the 1994-2000 time period, while Pacific's line counts have increased nearly 66% over the same period. (Klick Declaration, 10/30/01, pp. 12-13.)

ORA challenges Pacific's contention that plant extensions are more costly by noting that Project Pronto and fiber fed "next generation" DLC technology extend central office functions throughout Pacific's outside plant network without long runs of costly copper.

We have already found that because Pacific has not provided us with a model that we can use to test undisputed line growth, we must use the HAI model for this interim pricing effort. While Pacific alleges certain shortcomings in HAI such as potential problems with how it locates customers, this problem is not insurmountable because it pertains only to the one-third of customers that cannot be located using geocoded information. Indeed, HAI places two-thirds of its lines based on actual customer location information. We believe that any customer location problem is somewhat mitigated by our adjustments to HAI to back out the use of VGEs for line counts. When we base line counts on physical facilities rather than VGEs, as discussed above, we reduce the extent to which HAI "crams more customers" into existing areas for the one-third of customer locations that HAI must model without customer location information.

Further, we are not persuaded that potentially costly plant extension growth outweighs other cost reductions. We agree with Joint Applicants that it is improper for a cost model to consider only the cost of infill or plant extension growth. Instead, the cost model should consider the cost to serve total demand as set forth in our adopted Consensus Costing Principles.[31] Even if we were to consider Pacific's approach, Pacific's claims are disputed by Joint Applicants

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[31] D.95-12-016, Appendix C, p. 3.

with demographic, line growth, and ARMIS investment data. Given this material that contradicts Pacific's claims regarding growth, it would be improper to accept Pacific's unsupported assertions that the cost of plant extension growth exactly counteracts loop cost reductions. Therefore, we will rely on the HAI model for the interim, irrespective of Pacific's comments in this area. We reiterate that our use of HAI for interim rates in no way prejudges whether to use HAI for setting permanently revised UNE loop rates.

Pacific comments that the draft decision commits legal and factual error by assuming that all line growth has been in developed areas (*i.e.* "infill growth"). Pacific claims that the record is undisputed that 70% of growth has been higher cost plant extension growth, and that the HAI model used in the draft decision does not allow Pacific to test its assertions regarding line growth. Joint Applicants respond that Pacific is merely rehashing the same arguments rejected by the draft decision and that Pacific's claim of an undisputed record on higher cost plant extension growth is inaccurate.

We agree with Joint Applicants that Pacific is, for the most part, rearguing its earlier positions. We disagree with Pacific's contention that we have ignored undisputed evidence regarding line growth. The record was indeed disputed on whether 70% of growth is plant extension and whether the cost of plant extension counteracts other loop cost reductions. Pacific's assertions that plant extension growth completely offsets other loop cost reductions are not supported by the record. The Commission will resolve this dispute in the final phase of this case rather than delay interim relief.

Furthermore, the draft decision explains that reductions in line counts mitigate the extent to which HAI models infill growth. Thus, we did not ignore Pacific's criticisms in this regard. Pacific's concerns were addressed appropriately, given the fact that the dispute is over only one-third of the lines modeled and the total number of lines was reduced from Joint Applicants' initial model runs.

3. DLC Equipment Costs

Pacific asserts several flaws in Joint Applicants' analysis of DLC equipment cost reductions. Pacific does not dispute that DLC equipment prices have fallen in recent years.[32] Nevertheless, Pacific claims that Joint Applicants incorporated flawed assumptions into their DLC analysis. These assumptions include 1) an analysis that all remote terminals (RTs) are above-ground while ignoring allegedly higher cost underground controlled environmental vaults (CEVs), 2) allocations of DLC site preparation and installation costs that are too low, and 3) unsupported reductions in non-equipment DLC costs. Pacific contends that all of these items overstate the cost savings attributable to falling DLC equipment prices and are not justified.

Joint Applicants respond that they modeled RTs above-ground because that was the assumption Pacific itself used in the adopted OANAD studies. In addition, they claim that CEVs are less costly than RTs on a cost per line basis. (Joint Applicants Loop Reply Comments, 10/30/01, p. 13.) In other words, if HAI had modeled underground CEVs rather than above-ground RTs, the proposed interim prices might be even lower.

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[32] *See* Pacific Loop Comments, 10/19/01, p. 7. *See* also Attachment B to these comments wherein declarant Pearsons states that "There is little argument that DLC equipment prices have fallen in recent years," as well as his statement that "Pacific has reflected this decrease in its August 15 cost study filing" and that the "plug-in price for POTS like service fell 34%." (Pearsons Declaration, 10/19/01, p. 4.)

Joint Applicants address Pacific's other allegations by stating that site preparation, installation, and non-equipment DLC costs were held constant in the 1994 and 2000 runs of HAI. Therefore, Joint Applicants maintain that those costs play no part in the trend analysis supporting the 36% proposed loop reduction. (*Id.*, p. 13; Donovan Declaration, 10/30/01, p. 8-9.)

We find that Pacific's criticisms of Joint Applicants' assumptions have no merit. First, Pacific does not dispute that RTs were modeled as above ground in OANAD.[33] Indeed, above-ground RTs were the reality in the network at that time. Today, however, comments by both Joint Applicants and Pacific indicate that CEVs are replacing RTs in many locations. Unfortunately, the record is disputed on whether CEVs are more or less expensive than RTs on a per line basis. We find flaws with the analysis offered by both Pacific and Joint Applicants. Both parties appear to mix costs and line capacities from various size CEVs in their calculations and we are not confident in the calculations of either party. The record is incomplete in this area and it is unclear what CEV cost we would use if we wanted to change assumptions used in the prior OANAD decision. We cannot accept Joint Applicants' assertion that CEVs are less costly on a per line basis than RTs. Similarly, we cannot accept Pacific's assertions that CEVs are more costly than RTs. In keeping with our overall desire that interim rates reflect primarily undisputed cost changes, we will not change the original OANAD inputs with regard to RT and CEV costs. This is an area we can explore in setting final rates. For now, we will not change the

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[33] Pacific admits in its September 19 testimony that RTs were projected as above ground in the former OANAD studies. (*See* Testimony of Richard Scholl, 9/19/01, p. 29.)

original OANAD assumptions regarding above-ground RTs. We note that because we make no changes to prior RT assumptions, the loop cost trend analysis using HAI is not impacted in this area.

Second, we find that Joint Applicants only made adjustments for DLC equipment cost reductions and did not vary any other DLC-related costs such as site preparation, installation, and non-equipment costs in their trend analysis using the HAI model. (Donovan Declaration, 10/30/01, pp. 8-9.) Again, we find that because non-equipment DLC costs were held constant, they do not impact the trend analysis. We have no basis on which to increase these costs, as Pacific has suggested. Hence, we will reject Pacific's protests on this issue.

In comments on the draft decision, Joint Applicants contend that the Commission errs in not accepting the evidence they presented allegedly showing that CEVs are less costly on a per line basis than RTs.

In contrast, Pacific claims the draft decision errs in ignoring evidence that roughly half of the RTs in Pacific's network are housed below ground in CEVs. Pacific alleges that it has documented the real costs of CEVs while Joint Applicants' presentation of CEV costs is flawed and should be ignored.

We reiterate that we cannot agree with either side of this dispute without developing further record evidence on this issue. That effort is more appropriate for the next phase of this case. The comments clearly validate the conclusion in the draft decision that the record is disputed on RT and CEV costs. The results of the draft decision are left unchanged on this issue.

4. Loop Expenses

Pacific claims that Joint Applicants have made unsupported reductions in the expenses for maintaining and repairing loops. Pacific asserts that the reason for this decline in expenses is the application of an "investment/expense factor" embedded in the HAI model. Essentially, Pacific claims that for each dollar decrease in capital expenditures in the HAI loop model, HAI automatically decreases loop expenses by a certain amount. Pacific cites language where the Commission stated that this "investment factor approach is inconsistent with TSLRIC Principles No. 4…." (D.95-12-016, *mimeo.*, p. 10) and that simple common sense dictates that even if DLC equipment costs decline, repair expenses are not automatically reduced. Further, Pacific claims that expenses included in current loop costs are not based on 1994 data but on repair expenses that were trended downward for 1996 and 1997 to reflect forward-looking technology.

Joint Applicants defend their expense analysis by stating that Pacific's expenses have fallen considerably on a per loop basis since 1994. (Joint Applicants' Loop Reply Comments, 10/30/01, p. 14, footnote 36.) Joint Applicants' contend that HAI results track with actual trends and are a realistic reflection of forward-looking loop expense reductions (Klick Declaration, 8/20/01, p. 4, 8-11; Murray Declaration, 8/20/01, p. 5, 26-29, 35-37, 40-41.) Joint Applicants claim that Pacific has not addressed this substantial evidence of expense reductions and does not adequately support its claim that expenses have not dropped in the face of the actual reported data.

Joint Applicants defend their use of expense to investment ratios because they replicate forward-looking expense adjustments without requiring a data-intensive review of each expense account. Joint Applicants also note that the ratios used in HAI are those developed by the FCC for use in its Synthesis Model. Joint Applicants further maintain that Pacific uses this same FCC Synthesis Model to support its proposed switching discount in the Section 271 proceeding.[34]

ORA responds that it is reasonable to assume maintenance expenses have fallen for loops given Pacific's statements that implementation of Project Pronto would pay for itself in maintenance savings. ORA states that the forward-looking trends anticipated in the earlier OANAD calculations likely have not fully captured the expense savings associated with Project Pronto.

We agree with Pacific that the use of investment to expense factors in HAI may not be reasonable. The fact that investments in certain technologies may have decreased in price does not mean that all other expenses, such as maintenance, have also dropped. Nevertheless, we will not go so far as to state that an investment factor approach violates the forward-looking cost principles. Indeed, the same decision cited by Pacific as denying an investment factor approach suggests that "partial use of investment factors may help to reduce the possibility of 'gaming' in the assignment of maintenance expense." (D.95-12-016, *mimeo,* p. 12.) Because we are setting interim rates that will be subject to true-up, we will use a conservative approach and remove the effects of the investment/expense factor approach from the trend analysis to avoid the risk of overstating any loop cost decreases. We think that Pacific has raised valid criticisms of the factor approach so we will not use it to adjust rates for the interim. After we rerun the HAI model keeping expenses constant in the 1994 to

[34] *See* Pacific's "Motion to Notify Parties of Discounted Switching Prices," filed October 12, 2001 in the Section 271 Proceeding.

2000 runs, we see that this removal of the factor approach, coupled with our removal of the VGE line count method, has the effect of reducing the relative change in loops costs from 1994 to 2000 from 36% to 15 %. As a result, the interim loop rate proposed by Joint Applicants increases from $7.51 to $9.93.

Nevertheless, we find that Joint Applicants have provided preliminary evidence of expense cost declines based on actual data that we will need to explore further when we set final rates for loops. Thus, loop expenses will undergo further scrutiny in the next phase of this proceeding.

In comments on the draft decision, Joint Applicants, TURN, and ORA comment that the draft uses an improper methodology to remove the impact of expense-to-investment ratios and this error leads to an incorrect calculation of loop expenses. The draft decision holds expenses per loop at a constant level. At the same time, the analysis assumes an increase in the number of loops served, which causes total loop expenses to increase. Joint Applicants claim that it is undisputed that Pacific's total expenses have decreased, or at least remained flat, from 1994 to 2000. Using this reasoning, Joint Applicants argue that the Commission should hold total expenses constant rather than expenses per loop, which effectively results in a decrease in expenses per loop.

Pacific disputes Joint Applicants' comments on this point and instead argues that loop expenses were calculated correctly in the draft decision. Pacific states that Joint Applicants use flawed logic to suggest that expenses per loop should decline simply because the number of loops served has grown. For illustration, Pacific suggests that if it serves 100 loops at $10 per loop in 1994, the model should assume costs of $10 per loop in 2000 no matter how many loops are served. If the number of loops served has grown, then total loop expenses would also increase although per loop expenses would be held constant at $10.

Pacific claims that the draft decision uses the correct methodology in holding expenses per loop constant. Pacific also contends that ARMIS data cited by Joint Applicants actually shows an increase in total loop expenses.[35]

In the trend analysis in the draft decision, we intended to reverse the effect of the investment-to-expense factors embedded in the HAI model because we did not agree with the assertion that expenses automatically decline when investment levels decline. To remove the investment-to-expense factors, we held expenses per loop at a constant level for the 1994 and 2000 model runs. We are not persuaded to alter this methodology because the record thus far does not convincingly support a lowering of expenses per loop for two reasons. First, Pacific is correct that certain ARMIS data indicates an increase in total loop expenses from 1994 to 2000. Second, the record on expenses per loop is far from clear given disputes over line counts and growth assumptions in the HAI model. Therefore, we find that leaving expenses per loop constant for this interim rate analysis is the proper middle ground. Parties may make their case for a change to expenses per loop in the next phase of this case.

5. Summary of Loop Changes

We have modified Joint Applicants' HAI trend analysis to remove line counts using the VGE methodology and to remove the effects of the investment/expense factors embedded in HAI. These changes are shown in Appendix B and reduce Joint Applicants' requested loop discount from 36% to 15.1%, for an interim unbundled loop rate of $9.93.

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[35] Pacific refers to the Joint Declaration of Murray and Donovan, 2/28/01, p. 21.

VI. Interim Rates for Unbundled Switching

A. Joint Applicants' Proposal

In their motion for interim relief, Joint Applicants request that the Commission adopt an interim UNE switching rate equivalent to one of the two alternative switching rates that SBC has proposed for its Illinois affiliate, SBC-Ameritech. Specifically, Joint Applicants propose that the Commission set interim rates equivalent to either of the options shown below.

Table 1

Joint Applicant's Proposed Switching UNE Prices

Option # 1	
Basic/Centrex Port	$1.94
Local Switching Usage per Minute of Use	$0.001087
ULS-ST Local Switching-ST (w/UNE-P)	$0.001009
ULS-ST SS7 Signaling (w/UNE-P)	$0.001076
ULS-ST Tandem Switching per Minute of Use	$0.000215
Option # 2	
Basic/Centrex Port	$3.16
Local Switching Usage per Minute of Use	$0.000283
ULS-ST Local Switching-ST (w/UNE-P)	$0.000205
ULS-ST SS7 Signaling (w/UNE-P)	$0.000176
ULS-ST Tandem Switching per Minute of Use	$0.000215

Joint Applicants base their request on the contention that current switching prices are based on outdated 1994 to 1996 data. According to Joint Applicants, Pacific's own publicly available data reveals that certain switching costs have decreased significantly since that time.[36] Further, Joint Applicants highlight two of Pacific's admissions to support an interim rate on par with Illinois. First, Pacific admits it buys switches under an SBC-wide switching contract. (Kamstra Declaration, 4/20/01, para. 6.) Second, Pacific has stated that it can obtain switching prices that are as favorable as, or more favorable than those that its affiliates in Illinois and Michigan receive. (Joint Applicants' Reply

[36] Joint Applicants cite Pacific's testimony in the prior OANAD proceeding that the cost of new switches has been declining since 1993 at a rate of 8% per year. (D.99-11-050 at p. 172, fn. 152, as noted in Joint Applicants' Motion for Interim Relief, 8/20/01, p.7.) In addition, Joint Applicants explain that they ran HAI using SBC's publicly reported data for 1994 and 2000 for ARMIS expenses, ARMIS investment, and ARMIS demand data. (Klick Testimony, 8/20/01, p. 9.)

Comments, 9/7/01, p. 5, citing Pacific's response to discovery request No. 118.) Given these statements by Pacific, Joint Applicants claim there is no basis for assuming that Pacific's forward-looking switching costs exceed the costs of SBC-Ameritech for Illinois.

Joint Applicants justify the application of an Illinois rate by comparing the average lines per switch for Pacific with SBC-Ameritech in Illinois. Joint Applicants contend that Illinois is the closest proxy to California for local switching operations in SBC's service territory. Based on 2000 ARMIS data, Pacific has the highest average number of lines per switch, with Illinois as the next highest average. (Murray Declaration, 9/7/01, p. 5.) Joint Applicants also note that Pacific's current switching prices are as much as 252% higher than the prices SBC-Ameritech has proposed for Illinois and 207% higher than the prices the Michigan Public Service Commission recently adopted for SBC's affiliate in that state. (Motion for Interim Relief, 8/20/01, p. 8.) Joint Applicants maintain that this difference in rates is unsupportable given the similarities in switch density of the two states, shown by average lines per switch, and the admissions of SBC-wide purchasing.

To further support their request, Joint Applicants contend that the switching costs calculated by HAI confirm that switching prices should be as low as, or lower than, the proposed Illinois rates. Joint Applicants state that using Pacific's own public information about costs in 2000, HAI produces a total local switching cost per line of $2.82 per month. (Mercer Testimony, 8/20, p. 7; Mercer Declaration, 11/9/01, p. 3, footnote 10.) Based on this output of the HAI model, Joint Applicants maintain that either of the rate options proposed in Illinois would lead to conservative interim switching prices. In addition, the Joint Applicants contend that the FCC's Synthesis Model also produces forward-looking switching costs that support their interim relief request. (Klick Testimony, 8/20/01, p. 29-30.)

B. Amended Proposal

In the September 28 ruling, the Assigned Commissioner and ALJ stated a concern that the proposed interim rates from Illinois differ dramatically in price structure from Pacific's current rates. The ruling required Joint Applicants to reformulate their request to entail a percentage reduction from current switching rates using the same rate structure as is currently in use for Pacific. In their amended filing, Joint Applicants reformulated the price structure as requested, but continue to recommend that the Commission adopt interim unbundled local switching and tandem rates no higher than SBC-Ameritech's proposed rates for Illinois.

Joint Applicants derived a method to take the results of their switching analysis and convert it Pacific's current rate structure. Their proposal provides Pacific with the same compensation for an average end-user for local switching that SBC would receive for service provided to an average Illinois end-user based on the proposed Illinois prices. This reformulated request entails a 69.4% reduction from current local switching prices and a 79% reduction from current tandem switching rates.[37] Once again, the Joint Applicants rely on the output of

[37] Joint Applicants calculate the 69.4% discount by first determining the total local switching revenue for an average per-line usage level based on the Illinois rate level. The result, $3.54, is then divided by an estimate of average current revenue from UNE local switching prices in California ($11.56). ($3.54/$11.56 = 30.6%, or a 69.4% discount). They perform a similar analysis to determine the tandem switching discount of 79%. (Amended Proposal of Joint Applicants, 10/15/01, p. 3-4.)

the HAI model to support their request for an interim rate equivalent to the rates proposed by SBC-Ameritech in Illinois.

Joint Applicants maintain that this across the board 69.4% reduction for local switching may inadvertently result in a large true-up once final rates are adopted. Joint Applicants ask that the Commission consider minimizing the expected true-up by simplifying the current UNE switching rate structure for interim pricing. Joint Applicants provide two alternatives to the across the board 69.4% discount that they believe will result in a smaller true-up. The first alternative entails simplifying the distinctions between call types. Joint Applicants suggest that the Commission should remove the distinction between call types because Pacific itself has proposed this simplification when it proposed a discount for switching rates in the 271 proceeding. Specifically, Joint Applicants ask that, identical to Pacific's Section 271 proposal, the Commission eliminate the distinction in rates between intraoffice calls and originating interoffice calls.

Joint Applicants' second alternative switching price structure takes this simplification of call types and also removes any separate vertical feature charges. Again, this mimics Pacific's own proposal in the Section 271 proceeding. This would result in a discount of 63.2% for switching, and no charge for features. Joint Applicants contend that this second alternative proposal will likely lead to a smaller true up than the 69.4% across the board discount once final UNE switching rates are adopted.

C. Responses

Pacific responds to this amended proposal by stating that Joint Applicants have not demonstrated that Pacific's switching costs have fallen by anything approximating 69.4% or that the prices SBC-Ameritech has proposed for Illinois are a reasonable surrogate for Pacific's switching costs. Pacific contends that Joint Applicants have failed to provide factual support for lower switch prices, more efficient switch maintenance practices or any new technology. Further, Pacific contends that Joint Applicants have made no showing that Illinois costs are relevant or determinative of Pacific's costs.

First, Pacific disputes any attempt by Joint Applicants to imply that the proposed price for unbundled switching in Illinois is sufficient to recover all of Pacific's switching costs. Pacific's witness Dr. Palmer explains that SBC-Ameritech disagrees with a number of aspects of the Illinois switching cost study and is appealing it. Further, Pacific contends that Joint Applicants have not established that California and Illinois have any similarity on a number of factors critical to switching prices including fill factors, cost of capital, cost of money, depreciation rates, labor rates, tax rates, and switch types. According to Pacific, the Joint Applicants' proposal to use Illinois prices is based solely on claims regarding switching investment and does not consider other factors that determine the UNE rate for unbundled switching.

Second, Pacific provides a comparison of the relative cost results of the FCC Synthesis Model for California and Illinois and uses this comparison to dispute the Joint Applicants' proposal to use Illinois switching rates.[38] Based on its own run of the FCC's Synthesis Model, Pacific's contends that the Synthesis Model produces significantly higher end office usage and port costs for

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[38] According to Pacific, the FCC has never used the USF cost model to determine rates for a particular unbundled network element and the model was not designed to perform such a task. Pacific explains that it makes this comparison only because Joint Applicants and others have suggested using the USF Model. (Pacific Switching Comments, 10/30/01, p. 9, footnote 19.)

California than for Illinois and for other states where the incumbent local carrier has received approval under Section 271 to provide in-region long distance service.

Finally, Pacific notes that while Joint Applicants use a trend analysis using the HAI model to propose an interim loop rate, they do not use this same trend analysis to support an interim switching rate. According to Pacific, Joint Applicants performed the same trend analysis for switching costs and the results of that trend analysis do not justify the deep discount to Illinois rates that the Joint Applicants now propose. (Pacific Switching Comments, 10/30/01, p. 13.) According to Pacific, a trend analysis for switching suggests that local switching costs have fallen only 6% compared to the 69.4% reduction requested by Joint Applicants. (*Id.*)

D. Discussion

1. Whether to Adopt Illinois Switching Rates

At the heart of the debate over an interim UNE switching rate is whether to compare California to Illinois. Pacific argues that Joint Applicants have not convincingly shown that critical cost factors that affect the UNE switching rate, such as labor rates and switch types, are the same across the two states. As we discussed in Section IV above, Pacific did not provide the cost material requested by Joint Applicants regarding Illinois. This material might have supported Pacific's claim that costs in the two states are not comparable, but it might also have shown certain similarities in costs between the two states due to SBC-wide purchasing arrangements. As already discussed, because of Pacific's noncompliance with the ALJs' discovery rulings, we will deem the missing material to support the Joint Applicants' claim that switching rates in California should be lowered from current levels. Despite deeming this information to support interim rates, we will exercise our discretion so as not to adopt the full amount of interim rate discounts requested by the Joint Applicants. Rather, we will base interim rates on our review of the other issues raised in comments, and we will adjust Joint Applicants' proposed interim rates as set forth below.

This means that we do not agree to adopt the rates proposed in Illinois as interim UNE switching rates for California. While we will deem the missing cost data to support lower switching rates for California, we are not willing to presume that UNE switching rates for California and Illinois would be identical. We will not abdicate our responsibility under the Act to determine cost-based rates for California by merely adopting a rate proposed by an SBC affiliate in another state. We consider it plausible based on common sense that even if switching investment costs were identical in California and Illinois, certain differences in other cost drivers might exist between the two states, such as differences in taxes, labor expenses, or regulatory cost modeling assumptions. We note that Joint Applicants have presented public data showing a substantial degree of uniformity across geographic regions in switching cost trends. (Klick Declaration, 11/9/01, pgs. 11-13.) We agree with Joint Applicants' assertion that there are likely to be greater geographic differences in loop costs than in switching costs. And we also note that Joint Applicants have identified that on several switching cost drivers identified by the FCC, such as average number of lines per switch and the percentage of host and remote switches, there are similarities between Illinois and California. (Joint Applicants' Reply Comments, 11/9/01, p. 23; Klick Declaration, 11/9/01, pp. 15-16.) All of these factors point to using the proposed Illinois switching rates as a guidepost to refer to in lowering Pacific's UNE switching rates from their current levels.

Nevertheless, we prefer to rely on a California specific cost model analysis to develop our actual interim switching rates. Therefore, we will not adopt Joint Applicants' recommendation of applying proposed Illinois switching rates as interim rates for California.

2. Use of a Trend Analysis to Set Interim Switching Rates

We are left with the predicament wherein we have some indication that rates might be lower in California, but we cannot accept the Joint Applicants' proposed solution because it is not convincing for other reasons. Therefore, we must find another method for setting interim switching rates. Under the circumstances, we find it logical to apply the same methodology that we used to set interim loop rates, namely a trend analysis using HAI. Joint Applicants actually performed a form of this trend analysis for switching and mention it briefly in their motion and supporting testimony. (Motion for Interim Relief, 8/20/01, p. 8-9; Klick Testimony, 8/20/01, pp. 10-11.) While Joint Applicants have not proposed the results of that trend analysis for setting interim switching rates, we can use the data supplied by Joint Applicants to perform our own trend analysis.

Before turning to that trend analysis, we note that we are further persuaded to adopt interim switching rate based on public data showing substantial declines in per line and per minute of use switching costs since we last adopted UNE switching prices in D.99-11-050. Specifically, Joint Applicants analyzed ARMIS data that Pacific reported to the FCC for switch investments in California and found that:

- Pacific's booked switching investments per minutes of use declined 28% from 1994 to 1999. (Pitts Declaration, 2/20/01, p. 6.)

- Pacific's switch expenses per line dropped 23% from 1994 to 1999 and expenses per minute dropped 32% over the same period. (Murray Declaration, 2/20/01, p. 4.)
- Pacific's support investments for unbundled switching, including the cost of computers and related equipment, declined 15% from 1994 to 1999. (*Id.*, p. 7.)
- Pacific's ARMIS data for 2000 shows a continued decline in switch investments and switch expenses per minute of use. Specifically, Pacific reported a 26.5% decline in switching expense and a 51% decline in switching expense per DEM from 1994 to 2000. (Klick Declaration, 11/9/01, para. 18-19.)

We find that this publicly reported data supports the establishment of interim UNE switching rates while the Commission continues its review of updated cost models in this proceeding.

Joint Applicants used some of the public information cited above as inputs to their HAI model. Specifically, Joint Applicants filed testimony by Mr. John Klick describing a comparison of HAI model runs for 1994 and 2000 in which he adjusted model inputs related to switch usage levels. Klick's analysis indicated decreases of 20% for port costs and 33% for usage costs. (Klick Testimony, 8/ 20/01, p. 10-11, footnote 11.) Upon more thorough review of Klick's analysis, we find that it does not consider any changes in switching investment costs, which are central to the debate over declines in overall UNE switching rates.

Joint Applicants filed another switching cost analysis using HAI for the year 2000 by Dr. Robert Mercer. Mercer's analysis included a large amount of adjustments to default inputs in the HAI model, including changes to aerial and buried drops, distribution and feeder cable, fixed switching investment, depreciation and net salvage values, taxes, and the investment in switching related to peak usage. (Mercer Testimony, 8/20/01, p. 28-33; Pitts Testimony, 8/20/01, p. 16.) When we look at the adjustments that Mercer used in his analysis for year 2000, we find that it is appropriate to limit his analysis to fixed and peak usage switching investment levels and tax rate changes and remove all of his other adjustments. Mercer's switching investment figures and tax rates are based on publicly available FCC and OANAD information. We disregard Mercer's other adjustments because they mainly impact loop costs.

After making these adjustments to Mercer's 2000 HAI model run, we can compare the results to Klick's 1994 HAI model and obtain a percentage change for port costs, usage-related costs, and tandem switching costs resulting from that comparison. This trend analysis is essentially the same methodology that Joint Applicants used to arrive at an interim loop rate and we will use it here to adopt interim switching rates. The next section of the discussion describes corrections that we made to our switching trend analysis after the draft decision was mailed out for comment. In summary, the trend analysis, with the modifications described below, indicates a decline in port costs from 1994 to 2000 of 35.8%, a decline in usage related costs of 50.8%,[39] and a decline in tandem switching costs of 41.9%. (*See* Appendix C for a description of this switching analysis.) The adopted interim rates are set forth in Appendix A.

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[39] The percent change in usage related costs is calculated based on a comparison of the dialed equipment minutes (DEMs) from 1994 to 2000.

3. Adjustments to Trend Analysis Based on Comments on Draft Decision

a. Alleged Switch Investment Errors

Joint Applicants state that the proposed discount to switching rates is too small because it does not reflect the undisputed decline in the cost of switching equipment. Although the draft decision indicated an intent to reflect switching investment declines, the actual rate calculations fail to do so because the two model runs used in the draft decision both use the same FCC-adopted switching investment figures. According to Joint Applicants, the Commission can correct this oversight by using the 8% annual switching equipment cost decline noted by Pacific in the prior OANAD proceeding and raised on the record of this UNE reexamination. If switching equipment costs are recalculated using an assumption of an 8% annual decline, Joint Applicants contend that these costs in 2000 are only 55.8% of what they were in 1994. If the trend analysis is performed using this updated switching investment cost, the interim switching discount increases substantially.

Pacific responds that Joint Applicants suggested “8% solution” is a brand new proposal based on untested facts and must be rejected for several reasons. First, the Joint Applicants’ proposal uses the flawed expense to investment ratio that was already rejected in the draft decision’s loop analysis. Second, the notion of an 8% per year reduction is illogical because it implies switching will drop by 80% by the year 2012. Third, the proposal ignores Pacific’s evidence of actual switch purchase costs. Fourth, Joint Applicants cannot rely on the 8% reference from the prior OANAD record because it was not relied on in their motion for interim relief. Finally, Pacific describes numerous technical errors in Joint Applicants’ analysis including an extra year of reductions and use of the wrong starting point for the calculation.

It appears that Joint Applicants have highlighted an unfortunate error in our switching trend analysis. We certainly intended for the trend analysis to capture the declining trend in switch equipment costs from 1994 to 2000 and our failure to compare different switching investment figures in the two model runs was an oversight. We will accept the Joint Applicants' suggestion to derive a 1994 value for switching investment using the reference by Pacific to 8% annual declines in switching equipment costs.

We disagree with Pacific that we cannot rely on this evidence to make this adjustment. We can rely on evidence within the record of this case and not just the positions put forth by Joint Applicants in their motion for interim relief. Pacific's own witness in the prior OANAD proceeding made this statement and it was a key reason that we established this UNE Reexamination process. Joint Applicants highlighted the 8% reference on the record of this proceeding when nominating switching for reexamination, and again in the motion for interim relief.[40] Pacific never disputed this 8% reference when it was raised in this case. Even now, Pacific does not dispute the accuracy of the statement; it merely disputes its use in the HAI model.

While we agree with Pacific that it might be irrational to presume that switching costs will forever decline at a constant 8% rate, it is not unreasonable to use the 8% reference as a proxy in this context because we are only using it to set an interim rate, and we are only relying on the 8% reference for a limited time frame from 1994 to 2000. We agree it would be illogical to assume that switching costs will steadily decline at 8% beyond 2000, but we are

[40] *See* Pitts Declaration, 2/21/01, p. 5 and Motion for Interim Relief, 8/20/01, p. 7.

limiting use of the 8% figure to a six-year time period. We also reiterate that Pacific has never contested the 8% figure until now.

Pacific claims the 8% figure is contrary to evidence it has provided that its actual switch purchase costs show an overall switching price per line decrease of only 1.87%. This evidence was provided in Pacific's August 15, 2001 cost study filing, which we have already described as not meeting our criteria for use in this proceeding. Furthermore, we suspended examination of this evidence when we chose to consider interim relief. Therefore, the evidence cannot be relied on at this juncture. Interestingly, when we compare Pacific's switching discount proposal from the Section 271 proceeding to the results of our revised switching trend analysis that incorporates the "8% solution," the results are remarkably similar.[41]

We agree with Pacific that certain technical corrections must be made to Joint Applicants' analysis using the 8% figure. We will remove the seventh year of reductions that Joint Applicants included and we will use the switching investment in Mercer's analysis rather than Klick's analysis as the starting point for the calculation.[42] We have also incorporated Pacific's suggested adjustment to one model input known as the "DLC offset." (*See* Response of Pacific to Joint Applicants Technical Workpapers, 3/29/02, p. 7 and p. 19). We will not back out switching expense reductions as Pacific suggests because we

[41] Based on Pacific's usage assumptions, its proposed switching discount in the Section 271 Proceeding results in a 40% discount to switching rates compared to a 46% discount based on the Commission's switching trend analysis.

[42] The inputs that were modified in Mercer's analysis using the 8% per year adjustment were Switching Fixed Investment, Switching per line Investment and Common Equipment Investment.

find adequate support on the record from ARMIS data that Pacific's switch expenses have declined over the 1994 to 2000 time period. Although we eliminated automatic expense reductions in our loop trend analysis because trends in loop expenses were unclear, ARMIS data consistently indicates a trend of declining switch expenses. Therefore, we will not adjust the switching trend analysis in this regard.

b. Other Suggested Corrections to Usage-Sensitive Costs, Tandem Switching, and the 1994 Model Run

In addition to the "8% solution" discussed above, Joint Applicants comment that the draft decision's trend analysis for switching requires correction in three major areas. First, Joint Applicants allege that the draft decision used the incorrect model output in determining usage-sensitive costs. The Commission should have used the "cost per DEM" output rather than the "total switching cost" output. Second, Joint Applicants maintain that the draft decision inappropriately calculated tandem switching cost reductions by using the wrong output cell from the model. Third, Joint Applicants contend that the switching trend analysis used a 1994 base run that did not appropriately replicate OANAD adopted switching rates. They suggest several input modifications to items including switching expenses, land and building cost inputs, economic life assumptions and savings from integrated DLC systems to correct this alleged error.

Pacific does not comment on the alleged error regarding usage sensitive cost elements, but it does state that there is no merit to changes to the calculation of tandem switching costs. On the third point, Pacific challenges Joint Applicants suggested input modifications to the 1994 HAI model run by stating that the suggest modifications were not previously offered on the record of the case and it is improper to raise them now. Pacific also points out that

Joint Applicants previously argued that if rates are based on a trend analysis, it is not necessary for the HAI model to exactly replicate OANAD results.

With regard to usage-sensitive costs, we have reviewed the staff's trend analysis and determined that we should have calculated the interim discount to the usage rate elements using the "cost per DEM" as suggested by Joint Applicants. The draft has been modified to reflect this change.

With regard to tandem switching costs, we agree with Joint Applicants that the analysis in the draft decision inadvertently referred to the wrong cell in the model. We accept the correction suggested by Joint Applicants and have modified the draft in this regard.

Finally, we agree with Pacific that it would be improper to accept any of Joint Applicants' input modifications in an attempt to replicate OANAD adopted rates in the 1994 HAI model run. Unlike the "8% solution" that we accept, there is no obvious error that these additional modifications are intended to correct. In their motion for interim relief, Joint Applicants suggested the inputs to the 1994 model run that we used. Pacific is correct that Joint Applicants claimed it was not necessary for HAI to replicate prior OANAD results in order to use HAI for a trend analysis. We cannot accept Joint Applicants' assertions that we must now modify the 1994 HAI model run for switching because we previously dismissed this argument. Therefore, we are not persuaded that changes to these items are necessary or appropriate at this late date.

4. Interim Pricing Structure

With regard to pricing structure, Joint Applicants have actually provided three proposals involving interim switching rates, all with different price structures. In the September 28 ruling, the Assigned Commissioner and ALJ stated a preference to keep the pricing structure the same as current

OANAD adopted rates. In response, Joint Applicants explain that adhering to the current pricing structure could lead to a large true-up once final rates are set. They also note that Pacific itself has modified the pricing structure through its discount proposal in the Section 271 docket. Although Joint Applicants would prefer a simplified rate structure similar to Pacific's proposal in the Section 271 case, we have no basis on which to make interim changes to individual switching rate elements by a percentage different from the one we derived from the trend analysis. Therefore, the interim switching rates that we will adopt are based on a discount from current rates of 35.8% for the port, 50.8% for usage, and 41.9% for tandem switching, as shown in Appendix C.

Joint Applicants have suggested that we consider an interim rate that eliminates charges for vertical switching features. Currently, each vertical feature involves a separate charge ranging from 29 cents to $1.73. (The exact prices for 31 separate vertical features are set forth in Appendix A of D.99-11-050.) Joint Applicants explain that the HAI model includes feature hardware in total switch investment, which is then assigned to port and usage price elements. (Pitts Testimony, 8/20/01, p. 18.) In other words, the HAI model does not derive separate vertical feature price elements. Further, Joint Applicants claim that if new rates are calculated with a single across-the-board percentage discount that includes separate vertical feature charges, this results in a higher percentage discount applying to port and usage rate elements than is true if feature charges are eliminated. Joint Applicants explain that this approach could lead to larger true-up payments once final rates are determined. (Joint Applicants' Amended Switching Proposal, 10/15/01, p. 8.) According to Joint Applicants, it is simpler to avoid feature penetration assumptions and eliminate the separate feature charges. (*Id.*)

We note that Pacific itself proposed eliminating vertical feature charges when it proposed discounted switching rates in the Section 271 proceeding.

Joint Applicants are once again asking for a change in rate structure. In this case, we can distinguish this request because the HAI model is unable to calculate separate vertical feature costs. Instead, the model includes feature hardware costs in total switch investment. Because of this critical methodological difference, we are unsure what true-up effect might occur if we were to apply a straight percentage discount derived from the HAI model to the current vertical feature charges. Therefore, we will set all vertical feature charges, as listed in Appendix A of D.99-11-050, to zero for these interim switching rates because we think this will make any true-up to final rates much simpler. This elimination of all vertical feature prices for interim rates does not prejudge whether final rates will involve separate vertical feature charges. We will examine this issue in the next phase when setting final UNE switching rates.

In comments on the draft decision, Pacific claims that the draft commits legal error in setting vertical feature charges at zero. Specifically, Pacific contends that HAI's inability to identify separate vertical feature costs is not evidence those costs have dropped to zero. We agree with Pacific on this point. However, we do not agree that an interim rate of zero is legal error because the interim rates are subject to adjustment and we have made clear that this interim action does not prejudge whether final rates will involve separate vertical feature charges. The order explains the rationale behind an interim rate of zero, and we do not agree that this interim action amounts to legal error.

Tri-M and Call America request clarification that all vertical features, including Centrex type features, will be priced at zero for the interim. We have clarified that today's order applies to the features listed in D.99-11-050.

5. Comparison of Interim Rates to Other Reference Points

As we stated above, we can use the Illinois rates advocated by Joint Applicants as a guideline to determine whether our proposed interim rates are within a range of reasonableness. Although the interim rates set forth in Appendix A are not as low as the Illinois rates, we note that similarities between California and Illinois on switching characteristics noted by Joint Applicants, such as average number of lines per switch and the percentage of host and remote switches, lend credence to interim rates in California that trend in the direction of the Illinois rates.[43]

Our decision to set an interim switching rate is further supported by the results of the FCC's Synthesis Model. Pacific claims that its run of the Synthesis Model does not support a switching rate discount. According to Pacific's analysis, the model indicates that California end office usage and port costs should be 23% and 19% *higher* than Illinois costs, respectively. (Pacific Bell Switching Comments, 10/30/01, p. 10.) Joint Applicants respond that Pacific has

[43] We can also use the switching rates that Pacific itself proposed in the Section 271 proceeding as another point of comparison. It is illogical to assume that Pacific would voluntarily offer switching rates that are lower than what it believes its own costs to be. Indeed, Pacific itself stated that its "voluntary discounts have resulted in prices that are clearly within the range of reasonableness that a proper application of TELRIC would produce." (Pacific's Motion to Vacate, 10/19/01, Attachment B, p. 4.) While we have not analyzed Pacific's discount proposal in this proceeding, we note Pacific's own statements that its proposed rates are within the range of TELRIC. We have not verified the legitimacy of Pacific's assertion that the proposal is within a reasonable TELRIC range, and we express no opinion on the validity of this statement. Nevertheless, the interim switching rates proposed in this order are, depending on usage assumptions, within 5 to 7 percent of the rates that Pacific proposed in the Section 271 proceeding. By Pacific's own admission, its proposed rates are "reasonable," so it stands to reason that a rate that differs by only 5 to 7 percent is reasonable as well.

miscalculated and misconstrued the Synthesis Model results because Pacific's analysis fails to correct a substantial input error regarding usage volume. (Klick Declaration, 11/9/01, p. 5-6.) Moreover, Joint Applicants claim further flaws in Pacific's analysis from several factors including the fact that it relies on 1998 data rather than updated data for 2000. (*Id.*, p. 7.)

Based on analysis performed by our staff, we agree that Pacific's run of the Synthesis Model is flawed because Pacific did not re-run the model with correct usage volumes.[44] Rather, our staff corroborated the run of the Synthesis Model performed by Joint Applicants and its results do indeed show switching rates for California *lower* than those suggested by Pacific, and in line with the results described by Joint Applicants. (Klick Declaration, 11/9/01, pp. 5-6.) The results also indicate less disparity in state switching rates between California and other states than Pacific has suggested. Hence, we can dismiss Pacific's contention that the Synthesis Model supports higher switching rates for California because corrections to that analysis actually support a reduction in UNE switching rates from current levels.

We need not delve further into the other alleged flaws in Pacific's Synthesis Model analysis because we will not use the Synthesis Model to set the level of interim switching rates. As Pacific has noted, the FCC has specifically stated that it "has never used the USF cost model to determine rates for a particular element, nor was it [the USF model] designed to perform such a task. The model was designed to determine relative cost differences among different

[44] According to a response to a data request from Commission staff, Pacific corrected the error noted by Joint Applicants and re-ran the Synthesis Model, obtaining similar results to Joint Applicants. (Pacific Bell Response to Data Request, 12/11/01.)

states, not actual costs."[45] The FCC has cautioned that state commissions may not find it appropriate to use the Synthesis Model with nationwide values for UNE cost and pricing, and may instead choose to use statewide or company specific values.[46] We only note that the trend in cost declines shown by the Synthesis Model supports the rates we adopt today.

Finally, as we have already stated, our use of HAI to perform a switching trend analysis does not mean that we endorse the use of the model to set final UNE switching rates for Pacific. Although we base interim rates on a trend analysis using HAI, we make no determination that HAI is the proper modeling choice to set final UNE rates for Pacific.

VII. True Up

Joint Applicants request that any interim rates be subject to "true-down." Essentially, they request that if final rates are lower than interim rates, Pacific should provide refunds to purchasers of these UNEs. However, if rates are ultimately higher than any interim rate, purchasers would not owe any additional payment for the interim period.

In the September 28 ruling, the Assigned Commissioner and ALJ rejected this notion of a "true down." The ruling noted that if the Commission set interim rates that were not adjustable both up and down, and the interim rates were later

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[45] *See* Pacific Switching Comments, 10/30/01, p. 9, (quoting from *Memorandum Opinion and Order,* CC Docket No. 01-9, Application of Verizon New England Inc. to Provide in-Region, InterLATA Services in Massachusetts, released 4/16/01, para. 32).

[46] *In the Matter of the Federal-State Joint Board on Universal Service,* CC Docket No. 96-45, Ninth Report & Order and Eighteenth Order on Reconsideration, released 11/2/99, para. 41 and footnote 125.

found to be inaccurate, the Commission might potentially violate Section 252(d) of the Federal Telecommunications Act that requires cost-based rates for UNEs.

We affirm the earlier ruling in this proceeding that the rates adopted in this order should be adjusted, either up or down, once final rates are set. Therefore, we require Pacific to establish a balancing account to track the revenues received from these interim UNE rates for unbundled loops and unbundled switching. The balancing account should begin tracking revenues on the same date the interim rates become effective, which is the effective date of this order. Further, the balancing account should accrue interest at the three-month commercial paper rate, as is common practice for accounts of this type. When permanent UNE rates are adopted at the conclusion of this UNE reexamination proceeding, we will determine how to adjust loop and switching rates, either up or down, from the date the interim rates became effective through the date of adoption of a final rate.

VIII. Categorization

In Resolution ALJ 176-3059, dated March 15, 2001, the Commission preliminary categorized the consolidated applications in this proceeding as ratesetting. The Scoping Memo issued on June 14 affirmed this categorization and found that hearings might be required. Although no hearings have been held to date, hearings may be required in the next phase of this proceeding when we determine final UNE loop and switching rates.

IX. Comments on Draft Decision

The Commission mailed the draft decision of the ALJ in this matter to the parties in accordance with Section 311(g)(1) and Rule 77.7 of the Rules of Practice and Procedure. Comments were filed by Joint Applicants, Pacific, TURN, ORA, Z-Tel, Tri-M, and Anew Telecommunications Corporation d/b/a "Call America"

(Call America).[47] Reply comments were filed by Joint Applicants, Pacific, TURN, ORA and Z-Tel. In this section, we will address comments that pertain to the overall decision. We have already addressed technical comments on specific details of the loop and switching cost analyses throughout the text of the order where appropriate.

A. General Comments of Pacific

Pacific claims that the decision to grant interim relief commits legal error. For the most part, Pacific reargues the same positions it has already taken such as criticism of the HAI model, claims that its own cost filing met the Commission's cost model criteria, and other due process arguments. The decision already addresses these points and dismisses them. We do not agree that our decision to grant interim relief commits legal error. Pacific argues that interim relief is not warranted because we have not shown competitive local exchange carriers (CLCs) cannot compete at current prices. As we have already stated, the fundamental issue in this matter is whether Pacific's current UNE prices are cost-based. The scope of this case does not include a review of the current status of local exchange competition. When we dismissed Pacific's request to defer this UNE Reexamination, we noted the preliminary evidence of cost declines and our obligation under the Act to set cost-based rates. While we are, of course, deeply concerned with the effects of non-cost-based rates on competition, the impetus for our action today to set interim rates is the undisputed evidence presented thus far, which we cannot ignore, that many input costs have decreased.

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[47] Along with its comments, Call America filed a petition to intervene in this case that was subsequently granted.

Pacific argues that the interim rates will harm competition because the interim rates are below cost and will bring inefficient competition to the market. We do not agree with these assertions primarily because we have no evidence that these interim rates are below cost, as Pacific suggests. Indeed, as stated in the order, we have attempted to adopt conservative interim rates based on a trend analysis that incorporates undisputed changes in DLC costs and switching investment as well as increases in call volumes and lines served. Given that these interim rates are subject to adjustment at a later date, Pacific will not face financial harm from the interim rates. If anything, the greater risk lies with the CLCs that must make strategic business decisions based on temporary rates. With this in mind, we will attempt to expedite the next phase of this case to finalize UNE loop and switching rates.

B. Inflation Adjustment

The draft decision contained a section describing the conversion of the HAI model results from nominal dollars to real dollars. Specifically, the draft noted that the Joint Applicants had compared the nominal outputs of the 1994 and 2000 model runs to derive a percent change in loop rates over that time frame, but they had provided a switching analysis that compared HAI model runs after adjusting for inflation. To maintain consistency between the loop trend analysis and the switching trend analysis, the draft decision converted the revised HAI loop results into real dollar terms in order to compare the results in constant dollars and eliminate the influence of inflation over that time period.

Pacific claims that the draft decision errs in accounting for inflation by converting the HAI model results from 1994 from nominal into real dollars. Pacific maintains that because UNE prices have been held constant at 1994 levels, it is inappropriate to adjust costs for inflation unless UNE prices are adjusted for inflation as well. According to Pacific, the nature of a forward-looking cost exercise obviates any need to adjust for inflation when adjusting OANAD results and the Commission already made significant downward adjustments to Pacific's forward-looking costs when it adopted costs in 1998 based on data from 1994 to 1997. Joint Applicants respond that a pure time trend analysis should state all dollars in the same "real" base year and that the Commission should not eliminate this inflation adjustment.

Based on the comments, we will no longer convert the 1994 HAI model runs for either loops or switching into real dollar terms. The section describing this change has been removed from the decision. Although we have not changed our view that a pure trend analysis should be done in constant dollars, it appears that UNE cost comparisons are more problematic. First, it is not clear whether all of the 1994 model inputs are in 1994 dollars and the 2000 model inputs are in 2000 dollars. We do not necessarily have a pure starting point from which to adjust. Second, it is unclear whether inflationary adjustments were already incorporated in the prior OANAD proceeding. Third, Pacific is correct that the UNE prices the Commission adopted in 1999 have not been adjusted for inflation since the time they were adopted. Any inflation from 1999 to 2002 has made these prices decline in real terms. When we consider that UNE prices have declined in real terms and the underlying costs we are comparing are not necessarily in purely 1994 or 2000 dollars, we find that including an inflation adjustment may not be reasonable. Therefore, we will remove the inflation adjustment that was included in the draft decision.

Although we agree to remove the inflation adjustment from our trend analysis, we reject Pacific's suggestion that the Commission should annually adjust UNE prices for inflation. Many rates that the Commission sets are not annually adjusted. A decision on whether or not to provide an inflation adjustment is a policy choice that has never before arisen in the context of setting forward-looking costs for UNEs. Because the purpose of this decision is to set interim UNE rates while we press forward with an update of forward-looking costs for unbundled loops and unbundled switching, we will not include an inflation adjustment at this time.

C. Alleged Error Regarding Shared and Common Costs

Pacific maintains that the draft decision errs in applying a discount to UNE loop and switching *prices* rather than applying the discount to underlying *costs*. In the OANAD pricing order (D.99-11-050), the Commission adopted a 19% shared and common cost "mark-up" that was added to TELRIC costs to set UNE prices. Pacific now claims that this 19% mark-up should be removed from the applicable UNE price before any interim discount is taken. In other words, the discount should be applied only to the direct TELRIC cost for the UNE. Once an interim cost is calculated, Pacific suggests that the original amount of the mark-up should be added back, leaving the absolute dollar amount of the shared and common cost unchanged.[48]

Joint Applicants, TURN and ORA respond that the Commission did not set an absolute dollar amount for shared and common costs in D.99-11-050 and that Pacific is wrong to suggest that it do so now. Instead, consistent with D.99-11-050, a UNE's price should be determined by adding 19% to the underlying TELRIC cost. Indeed, Joint Applicants point out that Pacific itself

[48] For example, the current 19% mark-up on unbundled loops is $1.87 (19% of $9.83 TELRIC loop cost). Pacific would subtract any interim loop discount from $9.83, and then add back $1.87 to the new interim loop cost).

suggested this method when it stated that "whatever the updated cost is found to be in this proceeding (either the interim or permanent phase) must be increased by 19%." (Pacific Loop Comments, 10/19/01, p. 3.) Further, Joint Applicants contend that it makes no difference mathematically whether the percentage reduction is applied before or after the shared and common costs are added to the underlying cost.

Joint Applicants, TURN and ORA are correct that the Commission did not set an absolute value for shared and common costs in D.99-11-050. If we were to adopt Pacific's newest approach, which appears inconsistent with its earlier statements in this case, we would increase the percentage of shared and common costs as a component of the interim UNE rates and violate the edict in D.99-11-050 that the Commission would not consider the 19% mark-up in the annual reexamination proceedings. Therefore, we do not agree with Pacific that the draft contains a technical and legal error in how it computes an interim discount. Rather, Pacific's proposal would amount to legal error by adjusting the 19% mark-up. Furthermore, Joint Applicants are correct that there is no mathematical difference in taking the interim percentage reduction before or after the shared and common cost mark-up.[49] We make no changes to the draft in this area.

D. True-Up Comments

Z-Tel comments that the Commission should consider the interim rates as a ceiling and only allow for adjustments to these interim rates if the final rates are lower. If the final rates are higher, Z-Tel suggests that Pacific should absorb the loss as a sanction for failure to produce a useable model thus far in the proceeding. Z-Tel contends that competitive carriers cannot effectively compete under the risk of a true-up should the Commission set final rates higher than these interim ones. Z-Tel also suggests that CLCs have overpaid for UNE loops and switching for some time. Therefore, Z-Tel requests that the Commission retroactively adopt the interim rates in this order as of July 26, 2001, the date Z-Tel contends Pacific filed its latest loop and switching cost-studies.

We decline to make any changes based on Z-Tel's comments. This decision already extensively explains why interim relief should be subject to adjustment. In addition, we will not adjust UNE rates as of July 2001 as Z-Tel suggests because this would entail retroactive ratemaking.

E. Use of Synthesis Model

TURN expresses concern that the draft decision may discount the usefulness of the FCC's Synthesis Model in the next phase of this proceeding.

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[49] For the current UNE loop rate of $11.70, the underlying cost is $9.83 ($11.70/1.19). As an example, an interim rate of $10.53 results when a discount of 10% is taken from $11.70. Similarly, a 10% discount from the loop cost of $9.83 equals $8.85. If a 19% mark-up for shared and common costs is added to $8.85, this equals the same $10.53 interim rate.

TURN points out that all parties to this proceeding have found uses for the Synthesis Model to support their various positions. Thus, TURN suggests that the Synthesis Model can be adjusted to serve UNE costing purposes and the decision should not foreclose this option. Based on TURN's comments, we have clarified the draft on this point because, at this time, we do not intend to limit the modeling choices of parties in the next phase of this case.

F. Sanctions Against Pacific

TURN and ORA comment that the "issue sanction" against Pacific for failure to comply with discovery rulings does not go far enough. TURN and ORA ask that that the Commission apply a harsher sanction and grant Joint Applicants' request for an interim switching rate equal to rates proposed in Illinois. Joint Applicants' comments mirror these remarks and claim that the draft does not punish Pacific adequately. They claim the draft ignores evidence they presented that switching costs do not vary from state to state. They urge the Commission to consider SBC's Illinois switching rate proposal as a "judicial admission" that its switching costs in California are no higher than the Illinois rates. At the very least, TURN, ORA and Joint Applicants request that the Illinois switching rates be used as a benchmark to gauge the accuracy of the Commission's own proposed interim switching rates.

We agree with TURN, ORA, and Joint Applicants that we could have decided the matter against Pacific and awarded the Joint Applicants' full interim rate request. We certainly do not intend to reward Pacific for its noncompliance. Our aim in this case is to set a reasonable and somewhat conservative interim rate based on the record available. While it is unfortunate that parties feel Pacific is "getting off easy," it would be equally unfortunate to adopt a rate that might have no relationship to costs in California and that might result in competitors bearing the burden of an excessive true-up.

The decision explains that even with certain switching cost similarities and trends across states, the Commission prefers to exercise discretion and set interim rates based on its own analysis using the HAI model and California specific data rather than rates that are plucked from another state. It is our hope that in exercising this discretion, we are adopting interim rates that are more tailored to California and that, while somewhat conservative, should avoid the necessity of a large true-up once final rates are determined. At the same time, we agree that we can use the Illinois rates as a point of reference for determining whether our interim rates are reasonable. We have modified the draft accordingly to reflect this.

Also on the subject of sanctions, Pacific maintains there was no basis to impose sanctions for noncompliance because Pacific had appealed the rulings. Pacific states that "any prejudice [Joint Applicants] may have experienced was due to the length of time taken to resolve SBC Pacific's appeal." (Pacific's Comments on Draft Decision, 3/19/02, p. 15). We are offended with Pacific's suggestion that the Commission is somehow to blame for the effects of Pacific's noncompliance with two ALJ rulings. The Commission never granted Pacific's request for a stay of the prior rulings. Pacific alone must accept responsibility for its actions in this case and the sanction imposed.

G. Deaveraged Loop Prices

Joint Applicants contend that the draft decision errs in not adopting deaveraged loop prices in accordance with FCC requirements. They request the Commission apply the interim loop discount to the deaveraged prices recently adopted in D.02-02-047. Pacific responds that Joint Applicants' motion for interim relief never made this deaveraging request and it is procedurally improper to raise this request now in comments on the draft order.

We agree that it would be improper to apply the discount to the deaveraged rates adopted in D.02-02-047 without providing adequate notice and opportunity to comment to all affected parties. We will not delay issuance of this order to include this issue. Instead, we will direct the ALJ to solicit further comment on whether to apply the interim loop discount to the deaveraged rates we recently adopted. Then, we can consider the proposal to adopt deaveraged interim rates at a later date.

H. ISDN and Centrex Ports

Tri-M and Call America comment that the draft order fails to set an interim reduced rate for Centrex ports. Tri-M and Call America claim that the Commission ignores evidence that Centrex port costs are similar to basic port costs, particularly the fact that the proposed Illinois switching rates make no distinction between basic and Centrex port prices. Joint Applicants echo this same request that the Commission should adopt interim prices for all port types, including ISDN and Centrex ports.

Pacific responds that it was never put on notice that ISDN port prices were at issue in the interim phase, and that Joint Applicants' amended switching proposal referred only to the basic port price. Pacific contends there is no evidence on the record regarding the current costs of ISDN and Centrex Ports. Therefore, the Commission cannot set interim rates for anything other than the basic port.

It is true that Joint Applicants' motion for interim relief requested one rate for both basic and Centrex ports based on proposed Illinois rates. ISDN ports are not mentioned. We have declined to adopt interim rates equivalent to the Illinois proposal. Furthermore, the HAI model that we have used for a trend analysis to arrive at interim switching rates calculates only a basic port rate and we have no basis on which to set interim rates for any other port types. Pacific was not given notice that we were considering an *interim* rate for anything other than the basic port, although all ports are subject to reexamination in the final phase. Therefore, we cannot adopt a different outcome without adequate notice and an opportunity for parties to comment on application of the port discount adopted in this order to other port types. We will direct the ALJ to solicit comments on this issue by further ruling.

1. Findings of Fact

1. In D.99-11-050, the Commission established a process by which carriers with interconnection agreements with Pacific Bell could annually nominate up to two UNEs for consideration of their costs by the Commission.

2. In February 2001, the Commission received four requests to nominate UNEs for cost re-examination and a motion by Pacific to defer the cost re-examination proceeding.

3. On June 14, the Assigned Commissioner and ALJ issued a joint ruling denying Pacific's motion to defer any cost re-examination and finding sufficient justification to begin a reexamination of the costs of two UNEs, namely unbundled switching and unbundled loops.

4. On July 11, the Assigned Commissioner and ALJ issued a joint ruling identifying three criteria that Pacific's cost model filing must adhere to in order to be used for this cost re-examination proceeding.

5. Pacific's cost filings in this matter do not perform new runs of the SCIS model, the Cost Proxy Model, or other expense and support investment models.

6. Pacific's cost filings involve adjustments to the outputs of the prior OANAD models and it is not possible to provide the previously adopted models with new inputs.

7. On August 20, Joint Applicants filed a motion requesting interim UNE prices for unbundled loops and unbundled switching.

8. On September 28, the Assigned Commissioner and ALJ ruled that Pacific's August 15 cost filing did not meet the criteria set forth in the earlier ruling and that interim relief would be considered.

9. In *Turn v. CPUC*, the California Supreme Court held that the Commission could set interim rates as long as the rate is subject to refund and sufficiently justified.

10. Pacific and Joint Applicants agree that DLC equipment prices have fallen in recent years from the levels used in the prior OANAD cost proceeding.

11. Publicly available ARMIS data indicates declines in switching investment costs, declines in switch expenses, growth in the number of access lines served, and growth in call volume.

12. Pacific purchases switches under an SBC-wide agreement and can obtain switches in California at prices that are as favorable as, or more favorable than the prices it pays for switches in Illinois.

13. Pacific's cost filing does not allow parties or staff to test the effects of switching investment changes, DLC equipment declines, line growth, or call volume changes.

14. Commission staff have been able to understand how the HAI model derived its results for unbundled loops and switching and have modified HAI model inputs and assumptions to produce varying results. Although the HAI

model does not exactly replicate the costs adopted in prior OANAD decisions, staff have been able to replicate Joint Applicants' HAI model runs.

15. Section 252(d) of the Telecommunications Act requires the Commission to set UNE rates based on cost.

16. On January 7, 2002, Joint Applicants and Pacific jointly requested the Commission take notice of a decision by the D.C. Circuit Court in *Sprint Communications Company v. FCC.*

17. On October 9, Pacific filed an Appeal to the Full Commission of the September 28 ruling and on October 19, Pacific filed a motion to vacate the September 28 ruling.

18. On August 13 and again on October 3, the assigned ALJ and the Law and Motion ALJ directed Pacific to produce material relevant to the issues in this proceeding.

19. On October 12, Pacific filed an appeal and stay request regarding the ALJs' discovery rulings, which has not been acted on by the Commission.

20. Pacific did not comply with the August 13 and October 3 ALJ rulings ordering it to produce certain documents until the Assigned Commissioner issued a ruling imposing sanctions on Pacific.

21. Pacific produced documents and witnesses of SBC and SBC-Ameritech in the course of this proceeding.

22. The Commission does not generally entertain interlocutory appeals of ALJ rulings.

23. The Assigned Commissioner issued a ruling on February 21, 2002 imposing sanctions on Pacific for failure to comply with the ALJ's earlier discovery rulings.

24. Joint Applicants request a 36% discount from the current statewide-average loop rate of $11.70 based on a trend analysis of 1994 and 2000 data input into the HAI model.

25. In their trend analysis for loops, Joint Applicants have attributed 24 lines to each DS-1 line and 672 lines to each DS-3 line because these lines, respectively, carry 24 and 672 "voice grade equivalent" channels.

26. A DS-1 line consists of two copper loops and a DS-3 line is provisioned over fiber and does not involve any copper loops.

27. The record of this case is disputed on whether 70% of growth involves plant extensions and whether plant extension costs offset other loop cost reductions because of certain demographic, line growth, and ARMIS investment data.

28. The prior OANAD cost models assumed that all remote terminals (RTs) were above ground.

29. Although Pacific asserts that underground CEVs are replacing RTs in many locations, the record is disputed on whether CEVs are more or less expensive than RTs on a per line basis because both Pacific and Joint Applicants mix costs and line capacities from various size CEVs in their calculations.

30. The current record of this case does not support changing the original OANAD assumptions regarding RTs.

31. The HAI model uses expense to investment ratios to replicate forward-looking expense adjustments.

32. ARMIS data indicates an increase in total loop expenses from 1994 to 2000.

33. Joint Applicants request interim UNE switching rates equivalent to one of two alternative switching rates that SBC-Ameritech has proposed in Illinois.

34. In the September 28 ruling, the Assigned Commissioner and ALJ required Joint Applicants to reformulate their interim switching request to entail a percentage reduction from the current switching rate structure.

35. Joint Applicants filed an analysis of switching costs for 1994 and 2000 using the HAI model.

36. A trend analysis for switching using Klick's 1994 HAI model run and Mercer's 2000 HAI model run indicates a decline in port costs from 1994 to 2000 of 35.8%, a decline in usage-related costs over the same time period of 50.8%, and a decline in tandem switching costs of 41.9%.

37. The HAI model does not calculate separate feature charges because it includes feature hardware in costs in total switch investment, which is then assigned to port and usage price elements.

38. Pacific's analysis based on its run of the FCC's Synthesis Model is flawed because Pacific did not re-run the model with correct usage volumes.

39. When the Synthesis Model is re-run with correct usage volumes, it shows switching rates for California *lower* than those suggested by Pacific, and it shows less disparity in state switching rates between California and other states than Pacific has suggested.

40. Joint Applicants requested interim UNE rates subject to "true down," meaning that if final rates are lower than interim rates, Pacific should provide refunds to UNE purchasers, but not vice versa.

41. The Commission adopted deaveraged loop rates in D.02-02-047.

42. Joint Applicants have presented a summary of evidence indicating a reasonable presumption of cost declines for unbundled loops and unbundled switching based on declining DLC equipment costs, SBC-wide switching

purchases, ARMIS data indicating declines in switching investments and expenses, and growth in access lines and call volume.

Conclusions of Law

1. The Commission retains the independent state authority to review UNE costs and prices and should move forward with its review of selected UNEs, namely unbundled loops and unbundled switching, rather than await the outcome of federal litigation.

2. Pacific's August 15 cost filing does not allow parties and Commission staff to 1) reasonably understand how costs are derived, 2) generally replicate Pacific's calculations, and 3) modify assumptions from the prior OANAD models.

3. Without the ability to modify assumptions in Pacific's cost filing, it is not possible for parties and Commission staff to test the effects of declining input costs and volume and line growth.

4. Delays in this case may prolong current rates at non-cost-based levels that are not just and reasonable.

5. The Commission has the authority to set interim rates for UNEs.

6. Interim rates are necessary due to delays in this proceeding caused by the inadequacies of Pacific's cost filing and the need to examine competing cost models.

7. Pacific is not harmed by the interim rate levels if rates are subject to adjustment once final rates are determined.

8. The Commission can rely on the HAI model to set interim rates because the HAI model meets two of the three criteria set forth in this proceeding and because the Commission is not basing interim rates on the actual output of the HAI model but on a trend analysis of the change in loop and switching costs from 1994 to 2000.

9. The Commission may impose discovery sanctions where parties violate discovery procedures and rulings of the presiding officer.

10. The presiding officer must have the authority to rule on discovery motions and impose sanctions for discovery abuse to ensure all material evidence is disclosed without undue delay.

11. Pacific has waived any argument it does not have access to and/or control of documents of its affiliates and parent company by producing documents and witnesses of SBC and SBC-Ameritech in this proceeding.

12. We should deny Pacific's appeal of the September 28 ruling and its October 12 appeal of the ALJs' discovery rulings.

13. We should affirm the ALJ rulings requiring Pacific to produce out of state cost information and the Assigned Commissioner ruling of February 21, 2002 imposing an issue sanction against Pacific for its noncompliance with discovery rulings. The material that Pacific refused to produce should be deemed to support the adoption of interim rates for unbundled loops and unbundled switching that are lower than current rates.

14. We should deny Pacific's motion to vacate the September 28 ruling because we should not amend the schedule of the UNE Reexamination based on a conditional proposal that is currently pending in another docket.

15. We should account for growth in DS-1 and DS-3 lines on a physical pair basis rather than through the use of voice grade equivalents. DS-1 lines should be counted as two access lines and DS-3 lines as one access line for purposes of setting an interim loop rate.

16. Any customer location shortcomings in the HAI model are somewhat mitigated by adjustments to the model to remove voice grade equivalents.

17. We should dismiss Pacific's comments regarding the cost of plant extension growth because a forward-looking cost model should consider the cost to serve total demand, not merely an extension of it.

18. It is not reasonable based on the current record to assume that plant extension growth counteracts loop cost reductions.

19. If assumptions regarding RTs and other DLC non-equipment costs are held constant in the HAI trend analysis, these factors will not impact the results of the trend analysis.

20. It is not reasonable to assume that price decreases for certain loop technologies automatically lead to lower loop expenses.

21. Because the record on expenses per loop is unclear, we should leave expenses per loop constant for the loop cost trend analysis.

22. The investment/expense factors in HAI should be removed for purposes of the Commission's loop trend analysis.

23. Certain differences in cost drivers between California and Illinois may lead to different UNE switching rates in the two states.

24. It is reasonable to apply the same trend analysis using the HAI model that was used to set interim UNE loop rates to set interim UNE switching rates.

25. It is reasonable to incorporate an assumption of 8% annual switching equipment cost reductions from 1994 to 2000 based on Pacific's statements in the prior OANAD proceeding.

26. Publicly reported data, including data showing declines in switching investments and switch expenses, supports the establishment of interim UNE switching rates.

27. It is reasonable to compare Dr. Mercer's HAI model run for 2000 with the results of Klick's 1994 HAI model run.

28. Public data showing uniformity across geographic regions in switching cost trends and similarities between California and Illinois on certain switching characteristics supports the use of switching rates proposed in Illinois as a reference point in setting interim switching rates for California.

29. It is not reasonable to deviate from a 50.8% decline in switch usage rates identified by the HAI trend analysis to adopt different discount percentages for individual switching rate elements.

30. For the purposes of interim switching rates, we should eliminate vertical feature charges because the HAI model includes feature charges in switching investment and to avoid an unknown and potentially large true-up once final rates are set.

31. Pacific's contention that the Synthesis Model supports higher switching rates for California should be rejected due to flaws in Pacific's run of the Synthesis Model.

32. The Joint Applicants' analysis of the FCC's Synthesis Model supports a reduction in UNE switching rates from current levels.

33. Once final rates are adopted, these Interim rates should be adjusted, either up or down, from the effective date of this order.

34. We should affirm the Assigned Commissioner and ALJ ruling of June 14, 2001, which (1) denied review of the costs of the DS-3 entrance facility without equipment, (2) denied review of the EISCC, and (3) denied Pacific's motion to defer this proceeding.

O R D E R

IT IS ORDERED that:

1. The motion for interim relief, filed on August 20, 2001 by AT&T Communications of California, Inc. and WorldCom, Inc., is granted in part as set forth herein.

2. The monthly recurring prices for loop and switching unbundled network elements (UNEs) offered by Pacific Bell Telephone Company (Pacific) that are set forth in Appendix A to this decision satisfy the requirements of Sections 251(c)(2), 251(c)(3), and 252(d)(1) of the Telecommunications Act of 1996 and are hereby adopted on an interim basis.

3. Pursuant to Commission Resolution ALJ-181 (adopted October 5, 2000), Pacific shall prepare amendments to all interconnection agreements between itself and other carriers. Such amendments shall substitute the interim monthly recurring UNE prices for loops and switching set forth in Appendix A, for the UNE prices set forth in such interconnection agreements. Such amendments shall be filed with the Commission's Telecommunications Division, pursuant to the advice letter process set forth in Rules 6.1 and 6.2 of Resolution ALJ-181, within 30 days after the effective date of this order. Unless protested, such amendments shall become effective 5 days after filing.

4. The interim UNE prices for loops and switching adopted in this order shall be effective on the date this order is effective. Pacific shall make all billing adjustments necessary to ensure that this effective date is accurately reflected in bills applicable to these UNEs.

5. Within 10 days of the effective date of this order, Pacific shall file an advice letter to establish a balancing account to track the revenues received from these interim UNE rates, beginning on the same date the interim rates become

effective. The balancing account should accrue interest at the three-month commercial paper rate. Unless protested, the advice letter shall become effective 5 days after filing.

6. The assigned Administrative Law Judge shall issue a ruling soliciting further comments on applying the interim loop discount adopted in this order to the deaveraged loop rates adopted in Decision 02-02-047 and applying the interim port discount to all port types. The ruling on deaveraged loop rates shall be sent to the service list for I.00-03-002 in addition to the list of this proceeding.

7. Application 01-02-034, filed by The Telephone Connection Local Services LLC, is dismissed.

8. The Assigned Commissioner's and Administrative Law Judge's ruling dated June 14, 2001, which denies Pacific's February 28, 2001 Motion to Abey, is affirmed.

9. Pacific's October 9, 2001 appeal of the September 28 ruling is denied.

10. Pacific's October 19, 2001 motion to vacate the September 28 ruling is denied.

11. Pacific's October 12, 2001 appeal of the ALJs' discovery rulings is denied.

12. Pacific's October 31, 2001 Motion for Official Notice and its November 20, 2001 motion to strike the response of Joint Applicants to its October 31 motion are denied as moot.

13. We take official notice of the December 28, 2001 decision by the D.C. Circuit Court in *Sprint Communications Company v. FCC.*

14. The Assigned Commissioner’s ruling in this proceeding dated February 21, 2002, which imposes discovery sanctions on Pacific, is affirmed.

15. This proceeding shall remain open so that the Commission can determine final rates for Pacific’s unbundled loops and unbundled switching.

This order is effective today.

Dated _______________, at San Francisco, California.

APPENDIX A

Appendix A

Interim Rates

		Current	Discount %		Adopted Interim
Loop (Basic 2-wire)	$	11.70	15.1%	$	9.93
Switch					
Port (2-wire)	$	2.88	35.8%	$	1.85
Usage					
Interoffice originating					
setup per attempt	$	0.005940	50.8%	$	0.002921
holding time per MOU	$	0.001840	50.8%	$	0.000905
Interoffice termination					
setup per attempt	$	0.007000	50.8%	$	0.003442
holding time per MOU	$	0.001870	50.8%	$	0.000919
Intraoffice					
setup per attempt	$	0.013990	50.8%	$	0.006879
holding time per MOU	$	0.003620	50.8%	$	0.001780
Vertical Features	$	0.29 to 1.73	100.0%	$	0.000000
Tandem Switching					
setup per attempt	$	0.000750	41.9%	$	0.000436
setup per completed msg	$	0.001130	41.9%	$	0.000656
holding time per MOU	$	0.000670	41.9%	$	0.000389
UNE-Platform					
@ 1400 Local Voice & 300 Toll Minutes	$	23.18	30.85%	$	16.03
@ 2000 Local Voice Minutes	$	22.94	31.21%	$	15.78

APPENDIX B

Appendix B

Analysis of Interim Unbundled Loop Rates

	Loop 1994	Loop 2000	% decrease	Discount from current	New Price	
Joint Applicants' Analysis of Joint Applicant's Proposal						
DLC Costs			12.0%	$ 1.41	$ 10.29	
VGEs + Expenses			31.4%	$ 3.67	$ 8.03	
Total	$ 12.55	$ 8.06	35.8%	$ 4.19	$ 7.51	
Pacific's analysis of Joint Applicant's Proposal						
DLC Costs			8.3%	$ 0.97	$ 10.73	
VGEs			14.3%	$ 1.67	$ 10.03	
Expenses			15.8%	$ 1.85	$ 9.85	
VGEs + Expenses			30.1%	$ 3.52	$ 8.18	
Total			38.4%	$ 4.49	$ 7.21	
Staff's analysis of Joint Applicant's Proposal						
Removing VGEs	$ 13.44	$ 10.03	25.4%	$ 2.97	$ 8.73	1
Removing Expenses	$ 13.44	$ 9.93	26.1%	$ 3.06	$ 8.64	2
Removing VGEs + Expenses	$ 13.44	$ 11.41	15.1%	$ 1.77	**$ 9.93**	3

[1] Line count reduction factors 1994: 24.2% 2000: 6.84%; Expense and DLC savings kept constant.
[2] Before removing VGEs (VGE and DLC savings kept constant).
[3] After removing VGEs *and* Expenses (DLC savings kept constant).

APPENDIX C

Appendix C

Analysis of Interim Unbundled Switching Rates

Switching rate adjustment with **no** vertical feature rate elements	**Current Switch rate**	**HAI 1994 Run**	**HAI 2000 Run**	**% of change from 1994 to 2000**	**Interim Rate**
Port	$ 2.88	$ 2.65	$ 1.70	35.8%	$ 1.85
Usage					
Cost per DEM		$ 0.001180	$ 0.000580	50.8%	
Interoffice originating					
setup per attempt	$ 0.005940	$ 0.001937	$ 0.001694	50.8%	$ 0.002921
holding time per MOU	$ 0.001840	$ 0.000600	$ 0.000525	50.8%	$ 0.000905
Interoffice termination					
setup per attempt	$ 0.007000	$ 0.001937	$ 0.001694	50.8%	$ 0.003442
holding time per MOU	$ 0.001870	$ 0.000600	$ 0.000525	50.8%	$ 0.000919
Intraoffice					
setup per attempt	$ 0.013990	$ 0.001937	$ 0.001694	50.8%	$ 0.006879
holding time per MOU	$ 0.003620	$ 0.000600	$ 0.000525	50.8%	$ 0.001780
Tandem Switching		$ 0.000689	$ 0.000400	41.9%	
setup per attempt	$ 0.000750			41.9%	$ 0.000436
setup per completed msg	$ 0.001130			41.9%	$ 0.000656
holding time per MOU	$ 0.000670			41.9%	$ 0.000389